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Manpower and Organization

MANAGEMENT OF MANPOWER REQUIREMENTS AND AUTHORIZATIONS



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This instruction implements Air Force Policy Directive (AFPD) 38-2, Manpower. It provides guidance for determining manpower requirements; determining military essentiality; allocating military grades; managing civilian positions; documenting contract manpower equivalents (CME); establishing Active Guard and Reserve (AGR) authorizations; defining criterion and guidelines for Individual Mobilization Augmentee (IMA) requirements within the Selected Reserve; managing rated officer requirements and positions; establishing statutory tour requirements; and preparing a Manpower Estimate Report (MER). This publication applies to all activities assigned to the United States Air Force (USAF), which includes major commands (MAJCOM), field operating agencies (FOA), and direct reporting units (DRU), Air Force Reserve Command (AFRC), and Air National Guard (ANG) units, except where otherwise noted. The Air Force Instruction (AFI) may be supplemented at any level, but all supplements must be routed to Headquarters USAF Manpower, Organization and Resources, Manpower Requirements Division (AF/A1MR) for coordination prior to certification and approval. Refer recommended changes and questions about this publication to AF/A1MR using the AF Form 847, Recommendation for Change of Publication; route AF Form 847 through channels to AF/A1MR, 1040 Air Force Pentagon Suite 5B349, Washington, DC 20330-1040 or e-mail: afa1mr.workflow@pentagon.af.mil. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with the Air Force Records Information Management **System** Records Disposition Schedule https://www.my.af.mil/afrims/afrims/afrims/rims.cfm. The use of a name or mark of any

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SUMMARY OF CHANGES

This interim change corrects the order of precedence between the installation Manpower Office (MO) and Civilian Personnel Office (CPO) with respect to coordination on civilian position actions; specifically that the MO will <u>first</u> validate any proposed change to an existing/new civilian position description (PD) before passing it to the servicing civilian personnel activity.

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GENERAL ROLES AND RESPONSIBILITIES

1.1. Overview. This chapter provides a general description of the roles and responsibilities associated with the various organizations engaged in the overarching responsibility for management of manpower requirements and authorizations.

1.2. Roles and Responsibilities.

- 1.2.1. Air Force Directorate of Manpower, Organization and Resources (AF/A1M) is responsible for establishing and disseminating plans, policies, and procedures governing the effective and economical use of manpower.
- 1.2.2. Air Force Functional Authority Managers will coordinate all directives with AF/A1M. Any new or revised directive or interim change (e.g., AFIs, AFPDs, AFMANs, AFDDs) having a manpower impact in regard to either primary and/or additional duties must be identified by the Office of Primary Responsibility (OPR) and coordinated with AF/A1M prior to publication. Any new or revised directive not having a manpower impact must be certified per AFI 33-360, Publications and Forms Management. Air Force managers are also responsible for appointing functional representatives to assist the manpower standard development team. Air Force managers, functional representatives if appointed, coordinate on all manpower standards and variances. MAJCOM and installation manpower functions may also be required to review MAJCOM and installation publications in accordance with AFI 33-360, Table 2.2.
- 1.2.3. The Air Force Manpower Agency (AFMA) is responsible for providing and developing factors, tools, and overarching industrial and management engineering methodologies to accurately quantify essential manpower required for the effective and efficient accomplishment of capabilities supporting Air Force Concepts of Operations.
 - 1.2.3.1. Provides the full range of base civilian position classification support, provides history coding, and management of the Air Force standard competitive level codes.
 - 1.2.3.2. Develops manpower programming tools [e.g., man-hour availability factors (MAF) and indirect man-hour models] for Air Force-wide resource and military grades allocation, and advises Air Force leadership on innovative performance management in support of Air Force strategic plans. Manages various organizational improvement programs: the Air Force Climate Survey, the Innovative Development through Employee Awareness (IDEA) program, the Air Force best practices clearinghouse, and five Air Force organizational performance awards.
 - 1.2.3.3. AFMA's manpower requirements squadrons (MRS) and flights (MRF) are responsible for the accurate quantification of manpower requirements through the development of manpower standards. Other offices and agencies interested in what AFMA produces, such as Air Force Human Systems Integration Office (AFHSIO), can check AFMA's website for posted items.
- 1.2.4. MAJCOM, DRU, and FOA manpower offices (hereafter referred to as MAJCOM) are responsible for the effective and economical use of command manpower resources and

providing MAJCOM policy and guidance to base-level servicing manpower offices. MAJCOM manpower staffs will:

- 1.2.4.1. Review (in conjunction with their functional communities) products developed from manpower studies and manpower standards affecting their MAJCOM and submit all variance requests to AFMA.
- 1.2.4.2. Ensure their command follows Department of Defense (DoD) and Air Force directives on military essentiality.
- 1.2.4.3. Execute grade allocations, to include colonel and chief master sergeant grades, in accordance with implementation instructions.
- 1.2.4.4. Ensure all CME requirements are reflected in the July end-of-month Manpower Programming and Execution System (MPES) file.
- 1.2.4.5. Ensure documentation for validated IMA requirements are maintained.
- 1.2.4.6. Ensure rated positions are established at the lowest organizational level consistent with mission requirements.
- 1.2.4.7. To satisfy congressional requirements for new major acquisition programs affecting their command, submit MERs in accordance with Secretary of Defense (SECDEF) requirements and Chapter 11. MERs for major acquisition programs should be coordinated with AFHSIO through the mandatory coordination process.
- 1.2.5. Base-level servicing manpower offices are responsible for advising commanders on Air Force policy and procedures for the management of requirements and authorizations, performing base-level analysis, processing manpower actions, supporting manpower standards development studies through workload measurement and data collection and assisting local functional communities with their manpower requirements and concerns.

DETERMINING MANPOWER REQUIREMENTS

2.1. Overview. The Air Force considers manpower a resource to support approved programs. Manpower is not a program by itself which can be manipulated separate from the programs it supports. Manpower is a limited resource which is sized to reflect the minimum essential level to accomplish the required workload.

2.2. General Information.

- 2.2.1. Air Force planning and programming for manpower is centralized at Headquarters Air Force (HAF) where national security policy is translated into force structure programs. Execution is decentralized to MAJCOMs where budget and resource allocations are translated into command programs and units. The Air Force Management Engineering Program (MEP) provides manpower standards to help commanders determine manpower requirements.
- 2.2.2. Manpower requirements will only be based on MAJCOM or higher headquarters directives.
- 2.2.3. Air Force Functional Authority Managers will coordinate all manpower studies with AF/A1M prior to commitment of resources. This includes services provided by private sector contractors.
- 2.2.4. Lead teams for manpower studies will not release preliminary results, manpower estimates, or manpower requirements without leadership approval from AFMA/CC and/or AF/A1M. This direction protects the integrity within the manpower community and ensures only valid results are released to Air Force leadership.
- 2.2.5. All manpower standards applicable to the Active Component will be approved at Air Force level (AF/A1M), whether applicable to multiple commands, a single command, or a single location.
- **2.3. Air Force MEP.** The MEP provides the framework for developing Air Force manpower standards and analysis tools to systematically identify minimum and essential manpower required to accomplish approved missions.
 - 2.3.1. Manpower standards are developed in accordance with AFMAN 38-208, Air Force Management Engineering Program, which contains specific procedures, methods, tools, statistical requirements, and formats for conducting and documenting manpower studies.
 - 2.3.2. As part of the MEP, the Logistics Composite Model (LCOM) is an approved Air Force computer simulation program to determine aircraft maintenance manpower requirements. Note: When an LCOM model is not available or feasible to determine aircraft maintenance manpower requirements, the maintenance man-hour per flying hour (MMH/FH) requirements computation can be adapted. Specific instructions and an example are located at Attachment 2. Overarching LCOM program management is delegated to AFMA.

2.4. Roles and Responsibilities.

2.4.1. AF/A1M.

- 2.4.1.1. Functions as the OPR and approval authority for the MEP.
- 2.4.1.2. Establishes policy and guidance to determine and manage Air Force manpower requirements.
- 2.4.1.3. Prior to certifying, reviews all Air Force directives (e.g., AFIs, AFPDs, AFMANs, AFDDs) and interim changes for potential impact on manpower requirements or workload data reporting systems.
- 2.4.1.4. Provides manpower standard application and implementation guidance to commands.
- 2.4.1.5. Reviews and approves manpower standards.
- 2.4.1.6. Approves specific LCOM scenarios to meet aircraft maintenance manpower needs.
- 2.4.2. AFMA. As the management engineering arm of the Air Force, AFMA is responsible for the following:
 - 2.4.2.1. Executes the MEP per policy and guidance established by AF/A1M.
 - 2.4.2.2. Develops approved industrial and management engineering tools and techniques to effectively and efficiently execute the MEP.
 - 2.4.2.3. Provides Air Force-wide manpower study scheduling.
 - 2.4.2.4. Develops, posts, and maintains all manpower standards for the Air Force.
 - 2.4.2.5. Staffs manpower standard products with Air Force functional communities and MAJCOM manpower staffs during the standards development process. At a minimum, the manpower standards development staffing process consists of staffing the manpower standard data to include a manpower equation/determinant in various form(s), a description and/or picture of the work/process, any applicable variances, and the manpower table.
 - 2.4.2.6. Provides MAJCOMs with work descriptions and manpower standards for review during the manpower standards development and staffing process, respectively. MAJCOMs will provide the necessary supporting material to support their comments. The review should be accomplished within no less than 30 but no more than 60 calendar days, depending on the depth and critical timeline of the study.
 - 2.4.2.7. Notifies MAJCOM/A1Ms when new/revised manpower standards are updated and posted.
 - 2.4.2.8. Once MAJCOM/A1Ms notify the AFMA Management Engineering Division (AFMA/MAS) that a manpower standard is no longer applicable to a particular function/location for which it would otherwise apply, AFMA/MAS will then communicate with the applicable MRS or MRF to validate and confirm the non-applicability and notify the MAJCOM/A1M of the results. If confirmed, AFMA/MAS will update the applicability statement of the manpower standard.
- 2.4.3. Deputy Chief of Staff for Logistics, Installations and Mission Support (AF/A4/7) coordinates on all LCOM scenarios.

- 2.4.4. Air Force Functional Authority Manager.
 - 2.4.4.1. Works with the manpower community to periodically review manpower standards for currency.
 - 2.4.4.2. Appoints a functional representative to assist and be a part of the manpower standard development team. Partners with AFMA and participates in manpower standard development studies.
 - 2.4.4.3. Identifies initiatives and best practices to the AFMA lead team during the manpower standards development study process.
 - 2.4.4.4. Reviews and coordinates on new standards prior to AF/A1M approval.
 - 2.4.4.5. Submits requests for new MAFs to AF/A1MR.

2.4.5. MAJCOM Manpower Staff.

- 2.4.5.1. Provides manpower requirements determination policy and guidance to base-level servicing manpower offices.
- 2.4.5.2. Acts as focal point to the AFMA lead team for manpower standard studies and assists in the development and interpretation of the MEP.
- 2.4.5.3. Reviews and provides coordination on manpower standards development and LCOM products. Collects comments from MAJCOM functional and base-level organizations. Consolidates into a single command response back to the AFMA lead team.
- 2.4.5.4. Notifies base-level servicing manpower offices of their scheduled involvement in manpower standards development efforts.
- 2.4.5.5. Determines and/or validates all manpower requirements not included in approved manpower standards.
- 2.4.5.6. Coordinates proposed manpower changes with affected MAJCOM functional staffs prior to synchronizing projects in MPES.
- 2.4.5.7. Coordinates on LCOM scenarios.
- 2.4.5.8. Applies and implements approved manpower standards.
- 2.4.5.9. Establishes an annual manpower standard application program. At minimum, reviews manpower standards for applicability and update with the functional community and reapplies manpower standards every 2 years or earlier if dictated by significant workload or mission changes.
- 2.4.5.10. Implements the results of a manpower standard application into MPES. Ensures MPES reflects the results accurately within 90 days from either notification and/or posting of the manpower standard.
- 2.4.5.11. Notifies AFMA/MAS that a manpower standard is no longer applicable to a particular function/location for which it would otherwise apply. As stated in Paragraph 2.4.2.8, AFMA/MAS will then communicate with the applicable MRS to validate and confirm the non-applicability and notify the MAJCOM/A1M of the results. If confirmed, AFMA/MAS will update the applicability statement of the manpower standard.

- 2.4.5.12. Submits all valid variance requests to AFMA. Prior to submission, validates the need based upon required work in coordination with MAJCOM functional OPR and validates the number of hours estimated to accomplish the required work. During manpower standard development, ensures each variance meets the minimum threshold of 25 monthly man-hours to be considered and is not a combination of different processes used to circumvent this threshold. After posting the manpower standard, ensures each variance meets a minimum threshold of 80 monthly man-hours to be considered.
- 2.4.5.13. Air Education and Training Command (AETC) Manpower and Organization Division is responsible for developing all technical training requirements through the AETC Manpower Pricing System and Program Flying Training manpower determinants.
- 2.4.6. MAJCOM Functional Authority.
 - 2.4.6.1. Participates in manpower standards development studies and reviews and provides coordination to MAJCOM manpower staff on manpower standards development and LCOM products.
 - 2.4.6.2. Partners with MAJCOM manpower staff to validate and defend manpower requirements.
 - 2.4.6.3. Submits and/or coordinates on manpower change actions and other manpower products within their functional area of responsibility, before synchronization in MPES.
- 2.4.7. Base-level servicing manpower office. The base-level servicing manpower office advises commanders on the utilization and management of manpower requirements. Assists study team with workload measurement, workload factor (WLF) data collection and validation of that workload information. Collects and validates WLF data when the MAJCOM manpower staff requires collection for application of manpower standards. Provides Management Advisory Study (MAS) services for those units within their area of responsibility.
- 2.5. The Role and Definition of the Functional Account Code (FAC). A function is a homogeneous grouping of processes; that is, tasks that use similar equipment and processes are grouped together. A function is usually located in a centralized area. Functional personnel perform work that contributes to the same end product and their duties are similar or closely related. A FAC is used to identify each function and facilitate the analysis and accounting of its manpower requirements. A FAC title does not equate to (nor should it need to) an Office Symbol Code (OSC). The FAC shows where the position was earned (i.e., a particular function). For example, if the positions in a function are earned by manpower standard, the positions will have the FAC of the manpower standard. If the manpower standard has "X" in the FAC number, the "X" is a place holder. If a function has more authorizations than were earned, the position should be deleted when the manpower standard is implemented or show another FAC for which the position is earned. NOTE: An OSC can have more than one FAC; however, this should be kept to a minimum. If there is no manpower standard applicable to the function, the FAC still shows what function the position is earned in. In addition, FAC title nomenclature will not include duty title information or organizational structure information (e.g. "Chief" in Chief Budget Development or "Division" in Resources Division).
 - 2.5.1. FACs are 6-digit codes used to identify functions. The first four digits describe the Air Force level function. The last two digits (the 5th and 6th digit) can identify command-

peculiar functions. All FACs and their titles are controlled by AF/A1MR through system controls within MPES; the purpose being to standardize and avoid duplication of the codes and titles. The definitions for the 4-digit FACs (with the 5th and 6th digit being 00 [zero zero]) are located in the Air Force Data Dictionary within standard identifier of FU-500.

2.5.2. The first digit of the FAC represents the major groups of functions. The functional groups are divided into seven categories to identify the major type of work performed.

1XXX Command and Command Support

2XXX Maintenance

3XXX Operations

4XXX Mission Support

5XXX Medical

6XXX Research and Development

7XXX Activities Outside the U.S. Air Force

- 2.5.3. The functional category "8XXX" is used to identify the several missions and/or support activities performed by contract personnel under a single contract for operation of Air Force installations. Because of the restrictions imposed on its use, it is not considered a major category.
- 2.5.4. The first and second digits of a function code, when combined, represent the basic function of the major grouping (11XX Information Management, 15XX Comptroller, etc.). The third and fourth digits provide the additional detail to identify a specific activity (1110 Administrative Communications, 1512 Military Pay, etc.).
- 2.5.5. Submit FAC requests through your manpower channels to AF/A1MR with the recommended FAC number (if known), the FAC title and the FAC definition. If approved, the AF/A1M Integration Division (AF/A1MZ) will update the FAC information in the Air Force Data Dictionary..
- 2.5.6. AF/A1MR establishes new FACs when warranted within an approved manpower standard. The FAC for the manpower standard, developed by AFMA, is a 4-digit FAC with "XX" or "00" as the 5th and 6th digit.
- **2.6.** The Role and Application of the MAF and Overload Factor. The Air Force uses different MAFs to define and ultimately quantify the number of full-time equivalents (FTE) a given function requires, as relevant to the use of man-hours. Dividing the man-hours earned from the application of a manpower standard by the appropriate MAF and overload factor results in FTEs. AF/A1M approves all special MAFs. AFMA is responsible for developing and quantifying special MAFs for functions that cross command lines: e.g., fire protection personnel work a 72-hour workweek. MAJCOMs develop and maintain foreign national (FN) civilian and command unique MAFs. MAJCOM-developed MAFs must be reviewed by AFMA and approved by AF/A1M.
 - 2.6.1. A MAF is the average number of man-hours, per month, an assigned individual is available to do primary duties (direct and indirect work). The MAF calculations account for time away from the work center related to leave, medical care, education and training (other

- than on-the-job training), permanent change of station (PCS), organizational duties, etc. FN MAFs reflect host nation unique non-availability. Use AF-approved FN MAFs as appropriate to include special workweeks (e.g. fire protection).
 - 2.6.1.1. Attachment 3 contains standard, wartime, and special Air Force workweeks and MAFs for use in manpower standards application.
 - 2.6.1.2. Commands will submit requests for new MAFs to AFMA/CC for review. The request must contain detailed justification for the new MAF and describe the circumstances and personnel availability policies.
- 2.6.2. The overload factor is applied in conjunction with certain MAFs during the manpower standards application and ensures effective use of Air Force manpower authorizations. The overload factor realizes Air Force leadership's expectation that some overtime is an effective tool instead of adding additional manpower requirements.
 - 2.6.2.1. Different standard workweeks have different overload factors.
 - 2.6.2.1.1. Use a 7.7 percent overload factor for the normal 40-hour workweek for military and civilian peacetime MAFs.
 - 2.6.2.1.2. Use a 4.0 percent overload factor for the extended overseas 48-hour workweek.
 - 2.6.2.1.3. Use a 1.2 percent overload factor for the wartime sustained and wartime contingency 60-hour workweek.
 - 2.6.2.1.4. Do not apply overload factors against wartime surge, firefighter, United States Air Force Academy (USAFA) faculty, or FN civilian workweeks.
- 2.6.3. The rounding rules for converting man-hours to manpower in the application of manpower standards are stated below and are depicted in the example at Attachment 4.
 - 2.6.3.1. For United States Direct Hire (USDH) civilians, when man-hours are less than either 926.00 for Continental United States (CONUS) or 968.65 for overseas locations. Round any fractional manpower up to the next whole number.
 - 2.6.3.2. For USDH civilians, when man-hours are equal to or greater than either 926.00 for CONUS or 968.65 for overseas locations, round down to the nearest whole number if any fractional manpower is less than .50 and round up to the nearest whole number if any fractional manpower is equal to or greater than .50.
 - 2.6.3.3. For military and FN civilians, round manpower results to two decimal places and then round any fractional manpower up to the next whole number.
- **2.7. Manpower Standard Application Procedures.** AFMA notifies appropriate functional and manpower addressees at HAF and within each command when a new manpower standard is approved and posted (initial application). All Air Force manpower standards are available for download from the AFMA Air Force portal website.
 - 2.7.1. Unless otherwise directed by AF/A1M, MAJCOM manpower staffs/offices will apply and implement new manpower standards (initial application) and update MPES within 90 days of publication and reapply manpower standards every 2 years or earlier if dictated by significant workload or mission changes. During these reapplications, review the manpower

- standards for currency. Apply and implement LCOM manpower studies, simulated and non-simulated portions, under this same criteria.
- 2.7.2. When implementing the manpower standard, first follow the application procedures contained within the manpower standard, then use Attachment 4 to calculate detailed manpower requirements.
- 2.7.3. Manpower standards application and implementation include applying the manpower standard with the most current available WLF data and making the resultant changes to requirements in MPES.
 - 2.7.3.1. Update the coding of manpower requirements with the correct Manpower Standards Implementation (MSI) codes. There are multiple MSI codes that identify how the requirement was determined.
 - 2.7.3.2. Update MPES using the FAC associated with the manpower standard.
 - 2.7.3.3. Update authorized grades, using MAJCOM and Career Progression Group (CPG) grade factors for necessary adjustments.
 - 2.7.3.4. Update other MPES data codes as required.
- 2.7.4. Unless otherwise directed by AF/A1M, MAJCOM manpower staffs will:
 - 2.7.4.1. Reallocate available manpower resources among their installations in accordance with the application results of the manpower standard.
 - 2.7.4.2. Implement Air Force policy for MPES time-phasing as follows:
 - 2.7.4.2.1. When implementation results equate to an increase or decrease in funded manpower authorizations, the MPES action requires an effective date of current quarter plus two fiscal quarters (FQ) as of the first day of the following month of the manpower authorization change/action. The personnel system projects a personnel action the following month with a 6 to 9 months lead time. For example, if a manpower action is input to MPES during December (FYXXQ1), the effective date can be no earlier than 1 July (FYXXQ4) in order for the personnel system to generate a corresponding personnel action. The effective date is particularly important if a change results in a PCS action.
 - 2.7.4.2.2. When implementation results equate to an increase or decrease of unfunded manpower requirements, the MPES action should be effective immediately.
- 2.7.5. When the implementation results exceed the current number of funded authorizations, each command should either establish unfunded manpower requirements or realign funded authorizations within the command. Unfunded requirements will remain in MPES until the requirement no longer exists (i.e., subsequent application of manpower standard no longer supports the requirement).
- 2.7.6. If the Air Force functional authority gains approval from the Air Force Corporate Structure to cross-level manpower resources, AF/A1M will notify MAJCOM manpower staffs to apply and report the results to AF/A1M, but withhold implementation of the new manpower standard until further guidance is received. AF/A1M will process a normal intercommand transfer action in the next programming cycle. The AF/A1M staff will work with each command for specific situations.

USE OF MILITARY MANPOWER

- **3.1. Overview.** This chapter details the types of manpower used to accomplish Air Force missions and provides the tools for determining the appropriate mix of manpower and private sector support necessary to accomplish Air Force missions consistent with applicable laws and policies. DoD Instruction (DoDI) 1100.22, Policy and Procedures for Determining Workforce Mix, provides additional guidance and procedures for determining the manpower mix of each function. The table in Enclosure 3, para 1.a. of DoDI 1100.22 contains a decision matrix for determining the mix of a workforce to the function level. Attachment 5 contains decision matrixes for determining the manpower mix to the skill of the position.
- **3.2. Types of Manpower.** The Air Force uses three types of manpower to perform required work: military personnel (active duty, reserve, IMAs), and National Guard), in-service civilian employees, and contracted services.
- **3.3.** Use of Military Personnel. In accordance with DoD guidance, the Services assign military personnel only to positions that:
 - 3.3.1. Directly contribute to the prosecution of war (combat, combat support or combat service support).
 - 3.3.2. Are military by law.
 - 3.3.3. Are military by custom or tradition.
 - 3.3.4. Are needed for overseas rotation, operational deployment augmentation, and/or career field sustainment.
 - 3.3.5. See Attachment 5 for additional determination.
- **3.4.** Use of Nonmilitary Personnel. For combat support or combat service support, use inservice civilian employees or contract services. See Attachment 5 for additional determination.

3.5. Roles and Responsibilities.

- 3.5.1. AF/A1M is the OPR for policy defining military essentiality and ensuring MAJCOMs follow DoD policies and procedures when identifying manpower positions as military essential.
- 3.5.2. MAJCOM manpower staffs.
 - 3.5.2.1. Follow DoD and Air Force directives on military essentiality. Create new military manpower positions only if the positions satisfy military-essentiality criteria. Use Attachment 5 to guide the decision process.
 - 3.5.2.2. Maintain number of authorizations by grade at or below their command grade levels using their grade allocation factors levied by the Air Force Deputy Chief of Staff, Manpower, Personnel and Services (AF/A1). The CPG factors can be used as a guide to maintain grade levels within their command.
- 3.5.3. Base-level servicing manpower office:

- 3.5.3.1. Follows policies and procedures regarding military essentiality to establish new manpower positions, implement major mission or duty changes, or consider conversion of current positions. Use Attachment 5 in the decision process. Determine military essentiality on the basis of the requirements of the position, or need to maintain a specific capability rather than the characteristics of the incumbent.
- 3.5.3.2. Codes each manpower position in MPES for military essentiality, using the Inherently Governmental/Commercial Activity (IGCA) data field.
- 3.5.3.3. Coordinates all actions involving civilian manpower authorizations with the local servicing civilian personnel office.
- **3.6. Manpower Mix.** Military essentiality is the initial consideration to determine the correct manpower mix.
 - 3.6.1. Military Essential Work. When current authorized civilian positions are identified as military essential, commands should convert the civilian authorization to military through attrition unless mission requirements dictate a faster conversion. Coordinate any conversion in functions that impact ANG forces training with the National Guard Bureau; coordinate Air Force Reserve conversions with AFRC.
 - 3.6.2. Nonmilitary Essential Work. Use in-service civilian employees or contract services to perform work not requiring military personnel. Note: In work centers where civilian authorizations have been abolished as a result of a civilian reduction in force, MAJCOMs may not reassign permanent or overage military personnel to perform the tasks formerly accomplished by reduction-in-forced in-service civilian employees. Functional managers may maintain the workload with the work center's residual military including IMAs as specified in Chapter 9 or by realigning other civilian positions.
 - 3.6.3. Manpower Mix Decision Process. See Attachment 5.

MILITARY GRADES

4.1. Overview. This chapter provides an overview of the allocation process for military grades of funded authorizations and not used to determine grade requirements. Authorized (funded) military grades are established and allocated to commands within congressional mandate and Air Force policy. With the exception of colonels and chief master sergeants, the Air Force allocates grades via a programming model that utilizes required grades to determine a fair share grades distribution by command and CPG guidance. This chapter does not apply to general officers or the Air Reserve Component (ARC).

4.2. Grade Parameters and Allocations.

- 4.2.1. Military positions needed to accomplish Air Force missions are identified by grade and skill using manpower requirements determination processes.
- 4.2.2. Statutory ceilings constrain the number of field grade officers (colonels, lieutenant colonels, and majors) and senior enlisted non-commissioned officers (chief master sergeants and senior master sergeants). Colonel and chief master sergeant review boards are established to review, validate, rank and recommend approval to the Chief of Staff of the Air Force (CSAF) for colonel and chief master sergeant positions; thereby resulting in the funding of certain positions. Additionally, Air Force policy sets parameters for the remaining lower officer and enlisted grades through grade allocations. Grade allocations apply to lieutenant through lieutenant colonel and airman first class through senior master sergeant graded positions.
- 4.2.3. The Air Force considers enlisted skill levels, which can encompass several grades, as the primary indicator of what is required to perform the job. Therefore, the integrity of stated skill-level requirements must be maintained when implementing enlisted grade adjustments.
- 4.2.4. The Air Force documents all funded and unfunded military manpower requirements in MPES. Funded requirements contain required and authorized grades. The required grade data field of MPES reflects unconstrained required grades to accomplish a specific workload (constrained only by application of manpower standards). Authorized grades in MPES reflect fiscal reality and define grades allowed by applying allocated grade factors to the authorized end strength.
- 4.2.5. Responsibilities for Grades Allocation:
 - 4.2.5.1. AF/A1M:
 - 4.2.5.1.1. Provides overall planning and policy guidance.
 - 4.2.5.1.2. Approves fixed grade allocations.
 - 4.2.5.1.3. Approves officer and enlisted grade allocations.

4.2.5.2. AF/A1MR:

- 4.2.5.2.1. Obtains budgeted end strengths, statutory grade ceilings, and general officer positions.
- 4.2.5.2.2. Validates colonel positions.

- 4.2.5.2.3. Identifies fixed positions.
- 4.2.5.2.4. Assists functional OPRs with enlisted CPG review.
- 4.2.5.2.5. Provides final grade factors to MAJCOMs, FOAs, and DRUs.
- 4.2.5.2.6. Monitors commands for compliance with grade factors.

4.2.5.3. AFMA:

- 4.2.5.3.1. Defines and describes data system requirements to support the grades allocation process.
- 4.2.5.3.2. Provides systems analysis, programming support, and data processing support for developing and maintaining grades management computer programs.
- 4.2.5.3.3. Analyzes and evaluates results.
- 4.2.5.3.4. Prepares final grade factors for command allocations.
- 4.2.5.4. Air Force Personnel Center (AFPC). Provides historical student, transient, and personnel holdee data by grade for officers and enlisted.
- 4.2.5.5. Air Staff Functional Managers. Review enlisted CPG allocations, prior to development of final grade factors, for unique requirements and self-sustaining structures.
- 4.2.5.6. MAJCOMs, FOAs, and DRUs. Ensure required grades data in MPES reflects accurate command grade requirements, and implement new fiscal year (FY) grade allocations within time constraints levied by AF/A1. Command totals will not exceed grade levels allocated.

4.3. Roles and Responsibilities:

4.3.1. AF/A1.

- 4.3.1.1. Establishes and administers Air Force policy governing the management of all Defense Officer Personnel Management Act (DOPMA) colonel and chief master sergeant grades to include the control of those grade allocations.
- 4.3.1.2. Administers a Colonel Grade Review Board and Chief Master Sergeant Grade Review Board as needed or at least every 4 years.

4.3.2. AF/A1M.

- 4.3.2.1. Responsible for overall grade allocation planning, policy and execution guidance, oversees and manages the manpower grade allocation and CPG grade factor program process. Monitors commands for compliance.
- 4.3.2.2. Maintains approved directed grade lists for colonels and chief master sergeants.
- 4.3.2.3. Provides overall management and oversight of Air Force rotational and nominative positions.
- 4.3.2.4. Executive agent for AF colonel and chief master sergeant requirements management processes.
- 4.3.3. Air Force Colonel Management Office (AF/DPO).

- 4.3.3.1. Executive agent in the administration of the Colonel Grade Review Board.
- 4.3.3.2. Coordinates on all colonel grade change requests submitted to AF/A1M.
- 4.3.4. Air Force Chief Master Sergeant Management Office (AF/DPE).
 - 4.3.4.1. Executive agent in the administration of the Chief Master Sergeant Grade Review Board.
 - 4.3.4.2. Coordinates on all chief master sergeant grade change requests submitted to AF/A1M.
- 4.3.5. The Air Force Directorate of Force Management Policy, Force Management Division (AF/A1PF) supports the grade allocation process, to include the colonel review and the chief master sergeant review, by providing Air Force Specialty (AFS) sustainment factors.
- 4.3.6. Air Force Career Field Managers.
 - 4.3.6.1. Review CPG allocations prior to development of final grade factors for unique requirements and career field sustainment.
 - 4.3.6.2. Coordinate on colonel and chief master sergeant Military Position Descriptions submitted by commands and external agencies during the review process or for out-of-cycle changes.
- 4.3.7. MAJCOM and External Agencies. Note: External agencies are defined as those activities that have an authorized Air Force position, but are outside normal Air Force organizational channels, such as Office of the Secretary of Defense (OSD), North Atlantic Treaty Organization (NATO), combatant commands, defense agencies, federal agencies, attachés, and presidential or congressional executive offices.
 - 4.3.7.1. Submit colonel grade requests to the Colonel Grade Review Board or, for out-of-cycle changes, to AF/A1MR.
 - 4.3.7.2. Submit chief master sergeant grade requests to the Chief Master Sergeant Grade Review Board or, for out-of-cycle changes, to AF/A1MR.
 - 4.3.7.3. Execute grade allocations, to include colonel and chief master sergeant grades, as instructed by notification.
 - 4.3.7.4. Ensure colonel grade tracking numbers and chief master sergeant grade tracking numbers are entered into MPES and retained on subsequent transactions.
 - 4.3.7.5. MAJCOM/A1L assists MAJCOM/A1M with colonel reviews and prioritize/rank command colonel position requirements.
- 4.3.8. MAJCOM Manpower Staffs. Ensure MPES is updated with the authorized grade of funded positions and the position description number. Execute grade allocations in accordance with implementation instructions. Note: If the required grade of the position has been determined by other sources such as manpower standards, do not change the required grade during the allocation process. If the required grade has not been determined by other sources, the required grade should be changed to equal the authorized grade of the position.

4.4. Colonel Position Management.

- 4.4.1. Colonel grades are a critical resource managed within the statutory ceiling set forth by Title 10 United States Code, Subtitle A, Chapter 32, Section 523 (referred to as DOPMA), which does not include:
 - 4.4.1.1. AGR positions (Functional Categories X, U, V, and Y).
 - 4.4.1.2. Medical Corps, Dental Corps positions [Air Force Specialty Codes (AFSC) 44xx, 45xx, 47xx, 40C0C, 40C0D, and 48xx].
 - 4.4.1.3. Director of Admissions and permanent professors at the U.S. Air Force Academy.
- 4.4.2. The CSAF authorizes the Colonel Grade Review Board, appoints its chairperson and members and approves the colonel grades order-of-merit listing developed by the board. AF/A1 is appointed to administer the colonel grade program and allocations. CSAF notifies commands, external agencies and activities of any upcoming colonel grade review schedules.
- 4.4.3. A directed colonel grade requirement is a position warranting the grade of colonel due to the level of responsibility and/or authority required. The approved directed grade list contains certain colonel positions which are considered to be directed grade requirements, are institutionalized, and do not require board review (e.g., at HAF level: Executive Officer for Air Force Chief of Staff and Executive Officer for Air Force Vice Chief of Staff; at MAJCOM level: Headquarters Director, and at base level: Wing Commander, Wing Vice-Commander, Group Commander, Center Commander and Center Vice-Commander).
- 4.4.4. Criteria for directed colonel positions. The following criteria are used to assess directed colonel requirements at varying levels of organizations.
 - 4.4.4.1. General Criteria. The following criteria apply to all organizations:
 - 4.4.4.1.1. No colonel deputies.
 - 4.4.4.1.2. No colonel positions more than one organizational level below another colonel position.
 - 4.4.4.1.3. No colonel positions in same organizational structure (work center) as GS-15.
 - 4.4.4.2. HAF and MAJCOM headquarters. No colonels allowed below division or equivalent level.
 - 4.4.4.3. FOAs and DRUs. No more than two colonels in the headquarters/personal staff (i.e., above division or equivalent level). FOA and DRU subordinate units fall under appropriate criteria, such as wing, group, center, or the like.
 - 4.4.4.4. Installation.
 - 4.4.4.4.1. Wing and Group. Colonels allowed only in the following positions: Wing Commander (if no general officer), Vice Wing Commander, and Group Commanders.
 - 4.4.4.5. Medical Communities. Colonel requirements allotted in accordance with the Surgeon General (SG) Medical Flight Path guidance.

- 4.4.4.5.1. Medical Treatment Facilities. Medical Group Commanders, Senior Biomedical Service Corps, Medical Service Corps, and Nurse Corps at Peer Group 2 medical treatment facilities.
- 4.4.4.5.2. Medical Centers. No colonels within the Medical Center allowed below division or equivalent level.
- 4.4.4.6. Air Force Materiel Command (AFMC) Criteria. The following criteria applies to AFMC only. No colonels allowed below division level at ALCs, Product Centers, System Program Offices, Laboratories, System Program Directorates, and the USAF School of Aerospace Medicine.
- 4.4.4.7. Staff Judge Advocate positions in organizations where the Commander has General Courts Martial convening authority must be a colonel position.
- 4.4.4.8. Variances to the above criteria for directed colonel requirements will be submitted to AF/A1M through the MAJCOM/A1M for out-of-cycle approval.
- 4.4.5. Colonel grade change procedures.
 - 4.4.5.1. Approval authority to realign a nondirected colonel grade as an offset to another directed or nondirected colonel grade requirement or a directed colonel grade as an offset to another directed colonel grade requirement rests with the MAJCOM/CC or equivalent. Coordinate AFS changes with affected MAJCOM functional manager(s). An informational copy of the full transaction must be provided to AF/A1M and AF/DPO. If the MAJCOM/CC or equivalent wants to pursue the change with no offset, the MAJCOM forwards the package to include the request, justification, and rationale to AF/A1M. AF/A1M will staff for approval.
 - 4.4.5.2. Approval authority to realign a directed colonel grade as an offset to a nondirected colonel grade requirement rests with the CSAF. If the MAJCOM/CC or equivalent wants to pursue such a change, the MAJCOM forwards the package to include the request, justification, and rationale to AF/A1M. AF/A1M will staff the package for approval.
 - 4.4.5.3. Make all colonel grade changes effective no earlier than current plus two quarters from the date updated in MPES to allow lead time for personnel actions unless otherwise directed by AF/A1M.

4.5. Chief Master Sergeant Position Management.

- 4.5.1. Chief master sergeant grades are a critical resource, managed within the congressional ceiling set forth by Title 10 United States Code, Subtitle A, Chapter 31, Section 517. Funded chief master sergeant authorizations are approved by the chief master sergeant grade review process.
- 4.5.2. The CSAF authorizes the Chief Master Sergeant Grade Review Board and approves the chief master sergeant grades order-of-merit listing developed by the board. AF/A1 appoints the chairperson and all board members and administers the chief master sergeant grade program and allocation numbers. CSAF notifies commands and external agencies and activities of the upcoming chief master sergeant grade review.

- 4.5.3. A directed chief master sergeant grade requirement is a position warranting the grade of chief master sergeant due to the level of responsibility required. The approved directed grade list contains certain chief master sergeant positions which are considered to be directed grade requirements, are institutionalized, and do not require board review (e.g., at HAF level: Chief Master Sergeant of the Air Force, Chief of the Air Force Chief Master Sergeant Management Office, Chief of Enlisted Promotions and Evaluations, and Chief of Airmen Assignments; at MAJCOM level: Chief of Enlisted Promotion and Evaluation, Commandant Senior Noncommissioned Officer Academy, MAJCOM Command Chief Master Sergeant; at base level: Host Wing Command Chief Master Sergeant).
- 4.5.4. Chief master sergeant grade change procedures.
 - 4.5.4.1. Approval authority to realign a nondirected chief master sergeant grade as an offset to another directed or nondirected chief master sergeant grade requirement rests with the MAJCOM/CC or equivalent. Coordinate AFS changes with affected HQ functional manager(s). An information copy of the full transaction must be provided to AF/A1M, AF/DPE, and AFMA/MAP. If the MAJCOM/CC or equivalent wants to pursue the change but cannot identify a MAJCOM offset, the MAJCOM must request approval from Air Staff. Forward the package to include the request, justification, and rationale for change to AF/A1M, who will staff and coordinate with the HQ functional manager prior to forwarding the package to the appropriate approving authority.
 - 4.5.4.2. Make all chief master sergeant grade changes effective no earlier than current plus two quarters from the date updated in MPES to allow lead time for personnel actions unless otherwise directed by AF/A1M.

CIVILIAN POSITION MANAGEMENT

5.1. Overview. The Air Force manages civilian human resources within budgetary constraints while balancing mission needs with economy and efficiency of operations. The policy directives that govern appropriated civilian resource management, position management, and classification are AFPD 36-5, Civilian Personnel Resource Management, and AFPD 36-14, Position Management and Classification. The primary controlling factors in managing civilian resources are the validation of the civilian manpower requirement by the manpower office, the availability of manpower authorizations, work years, and financial resources. The manpower office reviews civilian position description documents to ensure the duties are consistent with the work center requirement.

5.2. Roles and Responsibilities.

- 5.2.1. Supervisor and/or commander. Submit temporary or term requests and new or revised civilian position description documents to the Installation Manpower Office (MO) for coordination using a locally-devised Authorization Change Request or other transmittal document/form. Once the proposed action is validated/approved, the MO will return the action to the originator who will attach it to the Request for Personnel Action (RPA) for transmittal to the servicing civilian personnel activity.
- 5.2.2. Base-level servicing manpower office.
 - 5.2.2.1. Coordinates with the servicing civilian personnel function on authorization change requests (ACR) and organizational change requests (OCR) impacting civilian positions.
 - 5.2.2.2. Coordinates on all new or revised permanent (i.e., non-temporary, non-term) civilian position description documents and ensures proposed civilian positions are assigned against a valid manpower position. Ensures the approved organizational structure is maintained.
 - 5.2.2.3. Ensures the duties described in the position description document are consistent with the AFSC and skill level allowed by existing manpower standards or by the position supervisor when a manpower standard is not available. Duty descriptions and codes in Air Force Officer Classification Directory (AFOCD) and Air Force Enlisted Classification Directory (AFECD), found on the AFPC website, are broad indicators of duties and responsibilities and can serve, in most cases, as references on the type and level of civilian skills required.
 - 5.2.2.4. Reviews the unit manpower document (UMD) and any other pertinent documents to determine intent of the civilian position to ensure work described in the position description document is appropriate for the work center and interviews the supervisor of the position.
 - 5.2.2.4.1. Prevents layered supervision within the organization by ensuring new or revised duties and responsibilities do not duplicate existing supervisory positions. Established supervision includes military or civilian personnel.

- 5.2.2.4.2. Identifies unnecessary deputy or assistant positions and/or duties. Coequal managerial positions or duplication of supervisory duties at any level is not permitted, whether performed by two or more military, civilians, or a combination. MAJCOM/A1Ms or equivalent approve deputy and assistant positions only if essential.
- 5.2.2.5. Reviews and validates civilian overhires which are typically used to meet short-term, seasonal, or cyclical workload requirements. Reviews civilian overhire requests to validate need and requirement. Temporary overhires are used for short-term, seasonal, or cyclical work, typically less than one year. Term overhires are typically used for non-permanent work up to 4 years. Work that is projected to last more than 4 years is considered to be permanent workload, and a funded position must be obtained for the required workload (exceptions are for positions involved in hazardous or environmental cleanup or base closures). Overhires are subject to: (1) manpower office validation of workload requirement; (2) funding validation by servicing resource management authority; and (3) recruitment of position approved by servicing civilian personnel function or other similar authority.
- 5.2.2.6. Submits project work file information to MAJCOM or builds project work file in MPES to update the occupational series (occupational code) and grade (pay band) upon receipt of the final classification determination from the servicing civilian personnel function. Final classification determination is defined as the official classification of the position.
- 5.2.3. Servicing Civilian Personnel Function.
 - 5.2.3.1. Ensures personnel requests that change or establish position description documents are coordinated with the base-level servicing manpower office.
 - 5.2.3.2. Ensures final classification determination is forwarded to the manpower office for update of MPES.
 - 5.2.3.3. Ensures overhire requests are coordinated with the base-level servicing manpower office.

CONTRACT MANPOWER EQUIVALENTS

6.1. Overview. CMEs are also known as Contract Man-year Equivalents. CMEs apply to services outlined and listed at Attachment 6. CME computation and documentation provides the Air Force with an estimate of the size of the contractor workforce, as part of the total Air Force manpower requirements documented in MPES supporting the Air Force mission. The methodology outlined in this chapter will be used to compute and validate Air Force CME requirements for applicable service-type contracts, including those resulting from A-76 competitions. Service-Type contracts are defined for the purpose of collecting CME data, as all contract vehicles (to include task order, indefinite delivery, indefinite quantity) supporting a mission, excluding the actual developmental work of weapons, products, or software systems. Service contracts directly supporting weapons system, e.g. missiles or aircraft, are considered a service-type contract for collecting CME date. If a service-type contract is terminated, discontinued, cancelled, or in-sourced, the applicable CMEs for that contract must be removed from MPES.

6.2. Roles and Responsibilities.

6.2.1. HAF.

- 6.2.1.1. The Assistant Secretary of the Air Force for Acquisition (SAF/AQ) provides guidance to command directors of contracting regarding the policy for standard CME computation and documentation as they apply to contracting activities throughout the Air Force.
- 6.2.1.2. The Assistant Secretary of the Air Force for Financial Management and Comptroller (SAF/FM) provides guidance to assist command and wing manpower and contracting functions in their efforts to identify and quantify CMEs.
- 6.2.1.3. AF/A1M provides commands with CME computation and documentation policy to ensure CMEs are properly entered in MPES and acts as the primary Air Force point of contact for consolidating and reporting CME information to external agencies.
- 6.2.1.4. AF/A4/7 ensures command functional OPRs applies the policy for standard CME computation and documentation to Depot Maintenance Activity Group (DMAG) and Supply Maintenance Activity Group (SMAG).

6.2.2. MAJCOM Manpower Staffs.

- 6.2.2.1. Coordinate with MAJCOM contracting function on CME computation and documentation policy provided to base-level servicing manpower offices.
- 6.2.2.2. Ensure all CME requirements are reflected in the July end-of-month MPES file.
- 6.2.3. Base-level servicing functions.
 - 6.2.3.1. Manpower. Reviews and coordinates on all actions when service-type contracts are requested, modified, or terminated. Ensures proposed contract work is not performed by the existing in-service workforce, computes associated CMEs and updates MPES accordingly.

- 6.2.3.1.1. A-76 CMEs. Enter CMEs in MPES immediately following the A-76 competition decision announcement. Use the applicable method in this chapter to determine number of CMEs. Update the following fields in MPES (at minimum): Manpower Standard Implementation Code (MSI), Functional Category Code (FCT), DoD Function Code (DFC), IGCA Year of Last Review (YLR), IGCA Year of Next Review (YNR), Air Force Remarks (RMK), and IGCA Commercial Activities Management Information System (CAMIS) Number (CA IDENT). Populate CA IDENT field with the DoD Commercial Activities Management Information System (DCAMIS) Number.
- 6.2.3.1.2. Non-A-76 CMEs. Validate and maintain accurate MPES accounting of CMEs. Review and/or validate CMEs annually to determine currency and accuracy, with functional OPR participation. Complete AF Form 4299, Contract Manpower Equivalent (CME) Computation Worksheet, to develop and document CME requirements for each contract. Use the AF Form 4298, Contract Manpower Equivalent (CME) Documentation Log, for tracking purposes or locally generated tool that captures and records the same data. Update the following fields in MPES (at minimum): Manpower Standard Implementation Code (MSI), Functional Category Code (FCT), DoD Function Code (DFC), IGCA Year of Last Review (YLR), IGCA Year of Next Review (YNR), and Air Force Remarks (RMK). NOTE: a future update to MPES will require the applicable code for the methodology computation and the contract number to be entered in the appropriate fields.
 - 6.2.3.1.2.1. Recurring CMEs. Transmit MPES CME transactions as contract service requests are processed (e.g., AF Form 9, Request for Purchase).
 - 6.2.3.1.2.2. Nonrecurring CMEs. From total nonrecurring requirements entered on the CME documentation log, transmit MPES CME transactions as service requests are accumulated. This update is accomplished, at minimum, once per FY. CMEs added into MPES for nonrecurring work should be effective for no more than one year.
 - 6.2.3.1.2.3. Centrally managed contract CMEs. These contracts are typically managed by one organization from which other organizations can utilize or buy support. Determine the local user portion of the contract, in coordination with the functional OPR, and enter the associated MPES CME transactions for that organization (e.g., an environmental support contract administered by Air Force Center for Engineering and the Environment where commands may go to purchase environmental civil engineer support).
- 6.2.3.2. Base-level Contracting Office.
 - 6.2.3.2.1. Notifies the base-level servicing manpower office when a request to contract is received from the customer so the necessary review and validation can be accomplished prior to contracting out the service and/or activity.
 - 6.2.3.2.2. Notifies the base-level servicing manpower office within 90 days after final contract award.
 - 6.2.3.2.3. Provide supporting data (e.g., contract requirements, total contract cost, contract labor cost, contractor full-time staffing, or man-hour estimates) to the base-

level servicing manpower office for applicable service-type contracts, to include all contract modifications, in time for CMEs to be reflected in the July end-of-month MPES file.

6.2.3.2.4. Establish and maintain an inventory of activities performed by a contractor. The inventory will include as a minimum: organization whose requirement is met through contract performance; the funding source and appropriation; the FY for which the activity first appeared on inventory and number of CMEs.

6.3. CME Computation Methodologies.

- 6.3.1. Methodology for CME computation resulting from competitive sourcing. When a contract is "let" to convert an activity for in-house to private sector performance as a result of an A-76 competition, the number of CMEs entered in MPES is the government's Most Efficient Organization's FTE bid amount. It is obtained from the file developed using Office of Management and Budget (OMB) costing software, COMPARE. The government's FTE bid amount will be used unless the contracted service requirements are modified and the requirements mandate a change to the number of CMEs; then determine the new CME requirement and update MPES.
- 6.3.2. Methodology for CME computation outside the competitive sourcing process.
 - 6.3.2.1. CMEs are also computed for applicable service-type contract workload (recurring and nonrecurring) when costs exceed the total annual composite rate of a staff sergeant (E-5). The rate may be found in AFI 65-503, US Air Force Cost and Planning Factors. Recurring workload are services directed by a MAJCOM or higher authority that normally continue throughout the year (e.g., custodial services, food services, plumbing services, aircraft maintenance services). Nonrecurring workload is limited to a one-time requirement, generally lasting one year or less, and is not continuous from year to year (e.g., disaster clean up, air show or open house support). The process for recurring and non-recurring CME determination is shown in Figure 6.1. The intent is to obtain the most accurate estimate of CMEs for the workload performed.
 - 6.3.2.2. There are three methods used to determine CME requirements outside the competitive sourcing process; these methods reflect a hierarchy of most to least accurate.
 - 6.3.2.2.1. Method 1. Use contractor equivalent full-time staffing levels, as available through the contracting office and verified by the functional OPR. Work with the contracting officer and functional OPR to obtain the appropriate manpower detail.
 - 6.3.2.2.2. Method 2. If a functional OPR estimate is not available, estimate CME requirements by applying existing manpower standards or other techniques outlined in AFMAN 38-208, Volume 2, Management Engineering Program (MEP) Quantification Tools.
 - 6.3.2.2.3. Method 3. If method 1 and method 2 are not feasible, this method uses the contract value budgeted, obligated, or awarded for the effort involved as a basis to estimate CME requirements.

No Action Review Exceeds Receive Contract Enter Data in Request for Threshold Yes-Request Worksheet Impact Costs? Manpower Determine Number Standard, Labor Cost & -No (Method 3)of FTEs Variance, Salary Factors Available? or MEP? Yes (Method 2) Yes (Method 1) Calculate & Enter Data on Enter Labor/ Document Requirements Salary Data in Worksheet & Man-hour Worksheet CME Log Requirement Divide Labor Enter Average Coordinate Costs by Salary Man-hours in with OPR Factors Worksheet Divide Manhours by Appropriate CME Impact? MAF Build CME Submit to Yes Determine Νo Command for Project AFSC Detail in MPES MPES Update -No-No Action Review Workload Requirement for Credit in Develop Negative Variance Variance Manpower Impact Standard?

Figure 6.1. Flowchart for Non-A-76 CME Process.

ACTIVE GUARD AND RESERVE REQUIREMENTS

7.1. Overview. Commands establish AGR authorizations for members of the ANG or AFRC. These authorizations are filled by personnel voluntarily serving on extended active duty or active duty (other than training) for a specified period of time, usually over 360 days. DoD Instruction (DoDI) 1205.18, Full-Time Support (FTS) to the Reserve Components, is the governing directive listing duties and responsibilities of FTS to the Reserve components.

7.2. Roles and Responsibilities.

- 7.2.1. Congress and OSD establishes ceilings/limitations on management headquarters activities and Air Force personnel end strengths. Programs utilizing AGR authorizations are subject to the usual budgetary review scrutiny just as any other Air Force program in accordance with Title 10 and Title 32 United States Code.
- 7.2.2. Command-established AGR authorizations.
 - 7.2.2.1. Include duties that support the applicable section of Title 10 United States Code, Armed Forces, AFPD 36-21, Utilization and Classification of Air Force Military Personnel, and AFI 36-2116, Extended Active Duty for Reserve Component Officers.
 - 7.2.2.2. Include duties not routinely assigned to, or not the responsibility of, the active force.
 - 7.2.2.3. Rotate between the ANG and AFRC if feasible.
- 7.2.3. The Director of the ANG (NGB/CF) and the Chief of the Air Force Reserve (AF/RE) validate all AGR authorizations not specifically established in law, ensure position currency, and approves establishing or changing AGR positions (as delegated by Deputy Assistant Secretary of the Air Force, Reserve Affairs (SAF/MRR).
- 7.2.4. Title 10 United States Code, Sections 12011 and 12012 limits the grades for AGR field grade officer and senior enlisted authorizations.
- 7.2.5. Document all AGR authorizations in MPES with the appropriate resource identification code (RIC) and functional category.

7.3. Procedures to Change or Request New Authorizations.

- 7.3.1. A single request may include more than one similar type position. All requests must identify the total number of authorizations required and follow the instructions in Attachment 5 to determine the appropriate manpower mix. AGR resources are extremely limited. Requests for new authorizations should include potential sourcing options. The requesting organizational commander or chief should include a cover letter stating the overall intent of the position. Follow the instructions in Attachment 7 for AGR position requests.
- 7.3.2. NGB/CF and AF/RE will review the requests for need, compliance, allocation use, and impact on congressional, OSD, and budget limits. NGB/CF and AF/RE approve validated requests.

- 7.3.3. NGB/CF and AF/RE send copies of the validation, funding decision, and supporting documentation to the requesting manpower activity.
- 7.3.4. HQ AFRC/A1M maintains AGR authorizations within approved end strength and grade ceilings for the AFRC AGR unit program. AGR unit requirements and authorizations supporting Air Force approved programs do not need to be forwarded to AF/RE.

RESERVE FORCES UNIT MANPOWER REQUIREMENTS

8.1. Overview. ARC units are constituted. They are allotted to the NGB and assigned to AFRC for activation by order of the Secretary of the Air Force.

8.2. Roles and Responsibilities.

- 8.2.1. AF/A1M.
 - 8.2.1.1. Arbitrates manpower requirement disagreements between gaining/losing commands and the ARC.
 - 8.2.1.2. Monitors the MPES manpower database to make sure the data complies with policies and procedures.
- 8.2.2. Gaining Command.
 - 8.2.2.1. Sets mobilization manpower requirements for gained units in coordination with the Joint Force Provider Component and in accordance with paragraph 8.4.
 - 8.2.2.2. Develops mobilization manpower requirements for ARC units. Provides manpower requirements to HQ AFRC/A1M or Headquarters National Guard Bureau Manpower, Organization and Resources Division (NGB/A1M).
 - 8.2.2.3. Informs NGB or HQ AFRC of specified manpower requirement changes needed before making them in MPES. Clearly explain the rationale for the change.
 - 8.2.2.4. Submits any disagreements that arise to AF/A1M for resolution. Sends a summary of the differences and recommendations to NGB/A1M, AF/REX and HQ AFRC/A1M.
- 8.2.3. ANG and AFRC/A1M.
 - 8.2.3.1. Uses the gaining command MPES manpower requirements to create the manpower database for ANG or AFRC units.
 - 8.2.3.2. Establishes manpower requirements needed for in-place mobilization and for managing, supporting and training units in a non-mobilized status when the gaining command does not provide this support. Incorporate these authorizations with the gaining command's mobilization manpower requirements, and send the consolidated data to HAF, the gaining MAJCOM, AFPC and the respective reserve units.
 - 8.2.3.3. Monitors unit programming actions to ensure unit designations are valid and personnel accounting symbol (PAS) codes are available. Confirm and communicate unit designation and PAS codes to gaining commands as soon as they complete programming actions. Note: Only NGB may allocate manpower resources, to include skill level and grade, and prepare manpower documents for ANG state headquarters according to approved Air Force staffing guides.
 - 8.2.3.4. Validates authorizations needed for the nonmobilized environment.
 - 8.2.3.5. Reviews ARC authorization skill and grade distribution to make sure it complies with current Air Force policy.

8.3. Establishing Manpower Requirements.

- 8.3.1. Criteria. The Air Force bases manpower authorizations approved for ARC units on:
 - 8.3.1.1. Established manpower standards and guides, support agreements, and programming documents.
 - 8.3.1.2. Approved unit type codes (UTC).
 - 8.3.1.3. Information and automated manpower file excerpts exchanged among gaining and host commands, the NGB, HQ AFRC, ANG and HAF.
- 8.3.2. Requirements for gained units. Commands establish mobilization manpower requirements for gained ARC component units; these requirements state the manpower resources needed to augment the active forces in wartime and contingencies. Note: Obtain NGB/A1M or HQ AFRC/A1M coordination before placing mobilization manpower requirements into MPES. Use the required grade of the active force UMD and standards for like functions to determine ARC required grades.
- 8.3.3. Requirements for in-place and non-mobilized units. The ANG and HQ AFRC will determine manpower requirements needed for in-place mobilization and for managing, supporting, and training Guard and Reserve units in a non-mobilized status.
 - 8.3.3.1. With justification for change, state whether the action was started by the gaining command or is a peacetime requirement authorized by this chapter.
 - 8.3.3.2. ANG or HQ AFRC maintains the ACRs for their respective authorizations included in MPES.
- 8.3.4. Documents. The USAF Program Guidance and USAF Programs, Installations, Units and Priorities documents provide the numbers and types of ARC units programmed by time period and unit location. AF/A1M uses the Manpower Transaction Report to monitor manpower programs established for ANG and AFRC units.
- **8.4. Changes in Grade.** ANG or HQ AFRC may specify military grades that differ from those specified in the gaining command's standard statement. This flexibility enables them to respond to management problems inherent to the unit.
 - 8.4.1. Keep all enlisted required grade changes within the required AFSC and skill level spread shown in the governing directive (MANFOR detail) by the gaining command. Further, do not change the authorized skill level more than one skill level from the required skill level unless the UTC allows. For example if the required skill is a 3D071, you may substitute a 3D051 or 3D091.
 - 8.4.2. Keep all officer required grade changes within the required AFSC and grade spread authorized in the governing directive (MANFOR detail) for the gaining command required AFSC. Further, do not change the authorized grades more than one grade level from the required grade unless the UTC allows more than one grade.
 - 8.4.3. Restriction. Commands may not use this grade realignment guidance to shift grades between gaining command wartime requirements and ARC additive requirements approved for in-place mobilization for managing, supporting, and training units in a non-mobilized status unless baseline enlisted and officer grade requirements are adhered to.

INDIVIDUAL MOBILIZATION AUGMENTEE REQUIREMENTS

9.1. Overview. IMAs are individual members of the Selected Reserve or Participating Individual Ready Reserve assigned to an active component of the DoD or other U.S. Government agency in war, contingency operations, and peacetime to meet national defense, strategic national interest, and domestic objectives.

9.2. Roles and Responsibilities.

- 9.2.1. MAJCOM manpower staffs:
 - 9.2.1.1. Review, coordinate, and validate requests from using organizations for new requirements, ensuring the requirement meets one of the criteria in paragraph 9.3 and does not violate the provisions in paragraph 9.4 or paragraph 9.5.
 - 9.2.1.2. Maintain documentation for validated IMA requirements.
 - 9.2.1.3. Coordinate requests for changes to funded IMA requirements/authorizations through the servicing IMA Readiness Management Group (RMG) detachment to identify adverse personnel impact. Note: Final approval authority for changes to requirements rests with the active duty MAJCOM, not the RMG detachment.
 - 9.2.1.4. Review unfunded IMA requirements every three years and delete requirements that are no longer valid.
 - 9.2.1.5. Submit requests to fund validated IMA requirements to HQ AFRC/A1M. Requests must include a proposed funding strategy to include realigning resources already used by the command, coordinated offsets from another command, or requests for new funding in the next budget cycle.
- 9.2.2. Organizations/agencies external to the Air Force:
 - 9.2.2.1. Process requests in accordance with DoDI 1235.11, Management of Individual Mobilization Augmentees (IMAs).
 - 9.2.2.2. Submit validated and prioritized IMA requirements to AF/REX through AF/A1M for review and resource options.
- 9.2.3. Organizations not identified in paragraph 9.2.1 or paragraph 9.2.2 forward requests for IMA requirements to their base-level servicing manpower office for review, coordination, and validation. Base-level servicing manpower offices follow the guidelines and criteria provided in this chapter.

9.2.4. HQ AFRC/A1M:

- 9.2.4.1. Provide guidance to manpower offices on the IMA program.
- 9.2.4.2. Review all requests for new IMA requirements or changes to existing requirements.
- 9.2.4.3. Program and manage IMA resources. Note: All decisions pertaining to the funding of IMA requirements will be made by AFRC.

- **9.3. Criteria.** As provided for in DoDI 1235.11, IMA requirements may be established to support mobilization (including pre- and/or post-mobilization requirements), contingency operations, operations other than war (OOTW), or other specialized or technical requirements to augment the active duty component structure. Use the following guidelines when validating IMA manpower requirements:
 - 9.3.1. Mobilization. Mobilization is the process by which the nation makes the transition from a normal state of peacetime preparedness to a warfighting. It involves the assembly, organization, and application of the nation's resources for national defense and it encompasses all activities necessary to prepare systematically and selectively for war. A federal active duty status applying specifically to Title 10 United States Code, Section 12302 (Partial Mobilization) and Title 10 United States Code, Section 12301 (a) (Full/Total Mobilization) in which an Airman is involuntarily called to active duty for the period specified in the applicable statute.
 - 9.3.2. Contingency operations and OOTW. The principal uses of IMAs under this criterion in support of manpower requirements related to Air and Space Expeditionary Forces (AEF) are as follows: (a) to backfill active duty positions that deploy from an AEF location; (b) fill a recurring AEF deployment requirement; or (c) augment Air Staff, MAJCOM and numbered air force (NAF) staff functions that must expand operations during these operations. The key basis for IMAs justified under this category requires that the IMA position either reduce the operations tempo (OPTEMPO) of the active force, provide workload relief for units that lose personnel on steady state deployment requirements, or augment MAJCOM or NAF staffs not manned to handle the expanded hours associated with contingency operations or OOTW.
 - 9.3.3. Specialized, technical, or scientific. To augment active forces when the workload is mission essential and to maintain a military capability requiring specialized, technical, or scientific knowledge or experience in scope not otherwise available in the active duty force.
 - 9.3.4. Economic. To augment active forces when the workload is mission essential and the cost of IMA augmentation is less than alternative manpower resources. To meet the economic criterion, funding for new IMA manpower positions must be offset by funds from existing programs or on the basis that funding will be requested during the Program Objective Memorandum (POM) process when IMAs provide a more economic alternative than manpower in existing or proposed programs. Note: IMA requests, under the economic criterion, must identify the resources by FY, program element and appropriation to be used to fund the IMA requirement.

9.4. Additional Guidelines.

- 9.4.1. IMA wartime authorizations. Before requesting IMA authorizations to satisfy wartime requirements, designate manpower made available by planned wartime reductions or eliminating peacetime workloads.
- 9.4.2. Central/Single Manager Programs. IMAs with AFSCs in the chaplain, medical, and legal career fields are designated as "centrally managed" at AFRC. All requests for new IMA authorizations with these AFSCs must be coordinated with the appropriate AFRC functional manager. Additionally, HQ Air Force Intelligence, Surveillance and Reconnaissance Agency (AFISRA) is designated as a single manager for all IMAs in the intelligence community. New requests for IMAs in these areas must be coordinated with

- AFISRA/A1M and AF/A2DFR. AF/RE retains final approval authority for all changes to IMA programming and end strength.
- 9.4.3. General Officer requirements. The Reserve General Officer Baseline Study periodically reviews and validates requirements and authorizations for general officers and mobilization assistants. The study is the basis for changes in requirements/authorizations to the gaining command for inclusion in MPES. AF/REG is the OPR for the baseline study.

9.5. Restrictions. IMAs may not be authorized for the following purposes:

- 9.5.1. To augment ARC force structure.
- 9.5.2. To augment ANG units.
- 9.5.3. To replace military personnel expected to be unavailable for duty because of leave, hospitalization, professional military education, or other temporary reason.
- 9.5.4. To replace civilian employees who are Ready Reservists of the military services.
- 9.5.5. To manage and train AFRC personnel when that is the sole justification for an IMA requirement. Note: MAJCOMs may use management and training of IMA personnel as partial justification for an IMA requirement, provided the MAJCOM can demonstrate that proficiency in the IMA's primary responsibilities will not be degraded; use of the IMA is economical and the IMA will exercise leadership and management skills required of the position and rank. Additionally, MAJCOMs may assign administrative management of IMAs to a senior IMA position as long as it has a valid primary tasking. Active duty personnel within the MAJCOM retain primary responsibility for managing IMA program operations.
- **9.6. Requirements Validation Process.** Processes for validating IMA requirements stem from responsibilities delineated in DoDI 1235.11.
 - 9.6.1. Requests for IMA requirements generated within HAF and MAJCOMS will be initiated by the using organization; coordinated with the using Command Program Manager and Centrally Managed Program Manager, as appropriate; and forwarded to the servicing manpower function for review, coordination, validation, and approval consideration.
 - 9.6.2. The using organization initiates requests for IMA requirements generated within OSD, Defense Agencies, Joint Staff, Unified Combatant Commands or other organizations and agencies external to the USAF. The servicing manpower organization validates it and forwards to AF/REX.
 - 9.6.3. Copies of all validated IMA requests will be forwarded by the approving authority to the RMG/CC.
 - 9.6.4. HQ AFRC instructs user organizations to delete IMA requirements for other than wartime mobilization requirements from manpower requirement documents if such positions are not funded and filled within three years of validation. The Air Force's Stressed Skills must be considered prior to deleting or realigning IMA requirements.
 - 9.6.5. IMAs may require 24 or 48 Inactive Duty for Training periods (IDT). Twenty-four IDTs are generally sufficient to perform the required AFSC proficiency and ancillary training. Forty-eight IDTs may be validated with sufficient justification.

- **9.7. IMA Funding Process.** Using organizations may fund their own validated IMA requirements by realigning existing positions or funding them via the PPBE process. They may also request funding from AFRC. AFRC may fund valid requirements by realigning existing positions or funding them via the PPBE process. IMA resources are part of the Air Force Reserve appropriation and are programmed and managed by AF/RE.
 - 9.7.1. Chronically unfilled IMA positions may be realigned to other validated requirements by AF/RE.
 - 9.7.2. AF/REX is the approval authority for increases and decreases in Military Intelligence Program (MIP) IMA positions.

AIRCREW MANPOWER REQUIREMENTS

10.1. Overview. Public Law and Air Force policy set specific restrictions on aircrew manpower authorizations. To comply with these restrictions, all organizations must strictly control aircrew authorization growth. All changes to aircrew requirements (except flight surgeons) must be approved no later than one year prior to the date of the proposed requirement change. This one-year lead time provides time to implement any necessary changes in aircrew production or manning levels to support the change. The manpower community is responsible for determining and documenting aircrew manpower requirements. All changes to aircrew authorizations must be coordinated with Air Force Deputy Chief of Staff for Operations, Plans and Requirements, Directorate of Operations, Operational Training Division (AF/A3O-AT). By definition, a manpower requirement is the manpower needed to accomplish a job, workload, mission, or program. A manpower requirement can be documented as a funded manpower authorization or an unfunded requirement. A manpower authorization is a funded manpower position on the UMD. This chapter does not apply to the ARC. AFI 11-412, Aircrew Management, establishes aircrew management procedures.

10.2. Roles and Responsibilities.

10.2.1. HAF.

- 10.2.1.1. AF/A1M determines and validates the aircrew manpower requirements in coordination with AF/A3O and maintains MPES data for aircrew manpower requirements and authorizations (with exception of SUPT FTRAP model in AETC).
- 10.2.1.2. AF/A3O establishes the rated baselines for MAJCOM operations (A3) and provides an information copy to MAJCOM manpower staff using end of FY requirements. The baseline will set each command's maximum total pilots, navigators (NAV), electronic warfare officers (EWO), combat systems officers (CSO) and air battle managers (ABM) by category.

10.2.1.3. AF/A3O-AT.

- 10.2.1.3.1. Evaluates requests for new positions and changes to existing authorizations and forwards approval or disapproval to the requester. Helps identify offsets to growth requirements, where appropriate and directed.
- 10.2.1.3.2. Coordinates with AF/DPO on requests for new colonel rated staff authorizations.
- 10.2.1.3.3. Ensures approved and funded crew ratio changes are incorporated into AFI 65-503, US Air Force Cost and Planning Factors. Suspense for change inputs is 31 December of each year. See paragraph 10.3.1. regarding the process to establish or change a crew ratio or crew complement.
- 10.2.1.3.4. Updates aircrew authorizations estimate using funded aircrew ratios.
- 10.2.1.3.5. Analyzes annual review of aircrew authorizations from each MAJCOM manpower staff and joint command or agency and returns comments or required corrections as needed.

- 10.2.1.3.6. Maintains the Aircrew 480 System (A480S). The A480S is a web-based tool providing multi-level coordination and approval of new and changed aircrew manpower authorizations. The system maintains a record of aircrew requirements for review and analysis.
- 10.2.1.4. AF/DPO evaluates requests for new colonel rated staff authorizations in coordination with AF/A3O-AT and forwards approval or disapproval to the originator.
- 10.2.1.5. The Air Force Medical Support Agency, Healthcare Operations (AFMSA/SG3) evaluates requests for new API 5 positions or changes to existing authorizations and forwards approval or disapproval to the originator. See Table 10.1. for a list of the API codes.
- 10.2.2. MAJCOM level (including DRUs and FOAs).
 - 10.2.2.1. Functional OPR.
 - 10.2.2.1.1. Assigns aircrew AFSCs only to those positions with duties clearly requiring aircrew skills as described in the AFOCD and AFECD found on the AFPC website. Ensures aircrew positions are established at the lowest organizational level consistent with mission requirements.
 - 10.2.2.1.2. Assigns a functional OPR to coordinate changes to aircrew authorizations with AF/A3O-AT and to coordinate flight surgeon requirements with AFMSA/SG3. Forwards OPR information to AF/A3O-AT and AFMSA/SG3.
 - 10.2.2.1.3. Submits all changes and new requests in sufficient time to be approved no later than one year prior to the date of the proposed requirement change. This provides time to implement any necessary changes in aircrew production or manning levels to support the change. MAJCOMs (ACC, AETC, AFMC, AFSOC, AFSPC, AMC, PACAF, AFGSC, and USAFE) have been delegated responsibility for management of non-API 5 aircrew requirements (grade, API, AFSC, etc.) within overall Aircrew Specialty [Pilot, CSO, ABM, Career Enlisted Aviator (CEA)] and Major Weapon System (MWS) Category (Fighter, Bomber, Mobility, etc.) levels determined by AF/A3O-AT. All other organizations must coordinate any changes to aircrew authorizations with AF/A3O-AT. Reserve components must coordinate any change in Regular Air Force aircrew positions with AF/A3O-AT. Note: All aircrew positions must be documented and approved either with an AF Form 480, Aircrew AFSC / Active Flying Justification, or electronic equivalent through channels to AF/A3O-AT per AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges.
 - 10.2.2.1.4. Submits all changes and new requests for rated justification for flight surgeon positions (API 5) directly to AFMSA/SG3.
 - 10.2.2.1.5. Submits proposed additions or changes to existing colonel aircrew staff authorizations to AF/DPO with courtesy copy to AF/A3O-AT. This requirement is in addition to the requirements described in Chapter 4.
 - 10.2.2.1.6. Submits requests (AF Form 480 or A480S electronic equivalent) for new authorizations or changes to existing authorizations with justification to AF/A3O-AT.

- 10.2.2.1.7. Provides offsetting authorizations for new aircrew requirements. Additions or changes to aircrew requirements are possible only with offsets within the same aircrew specialty and MWS category. Offsetting authorizations are also required for any aircrew changes generated by new manpower standards or the reapplication of existing manpower standards.
- 10.2.2.2. Operations (A3). Approves additions or changes to aircrew authorizations (except flight surgeons) and maintains the command's baseline requirements. Any change to the baseline requirements must be approved in advance by AF/A3O-AT. The functional OPR maintains a current file of all AF Forms 480 or A480S electronic equivalent.
- 10.2.2.3. Surgeon General. Manages the justification process for flight surgeons with API 5 as described in AFI 11-401, Aviation Management. For requirements not covered by a manpower standard, submit the AF Form 480 or A480S electronic equivalent directly to AFMSA/SG3.
- 10.2.2.4. Manpower, Organization and Resources (A1M). Assigns aircrew AFSCs with applicable API codes only to those positions with duties clearly requiring aircrew skills as described in the AFOCD and AFECD found on the AFPC website. Ensures aircrew positions are established at the lowest organizational level consistent with mission requirements. Coordinates with command A3 or equivalent to validate aircrew requirement changes and the annual review of aircrew authorizations. Updates manpower requirement API attributes in MPES to reflect approval of new or changed positions. An aircrew AFSC without an aircrew API is not a valid position.

10.2.3. Base Level.

- 10.2.3.1. Functional manager forwards requests for new authorizations and changes to existing authorizations through the servicing manpower office to the MAJCOM manpower staff for validation and coordination with the MAJCOM functional authority. Conducts an annual review of aircrew authorizations as directed by the command. Maintains a current file of all AF Form 480 or equivalent A480S data electronically, documents supporting justification (include AF Form 480 or A480S electronic equivalent, as required) and coordinates aircrew position requests with the base-level servicing manpower office.
- 10.2.3.2. Manpower office coordinates with functional authority on aircrew data changes and the annual review of aircrew authorizations. Submits MPES changes to MAJCOM manpower staff.

10.3. Specific Areas of Responsibility.

- 10.3.1. Crew Ratio or Crew Complements.
 - 10.3.1.1. Existing Crew Ratios or Crew Complements. MAJCOM-level Strategic Plans and Programs (A8) submits proposed changes to existing crew ratios or crew complements to the Air Force Deputy Chief of Staff for Strategic Plan and Programs, Directorate of Programs (AF/A8P), with a copy provided to AF/A3O-AT. AF/A8P will coordinate the proposed change with AF/A1M and AF/A3O-AT. Once AF/A8P approves the proposed changes, they will inform the MAJCOM-level manpower function

for programming and AF/A3O-AT who will ensure that funded changes are made to AFI 65-503. Changes must be received by AF/A3O-AT no later than 31 December to be included in the annual update to AFI 65-503.

10.3.1.2. New Crew Ratios or Crew Complements. Lead commands submit proposed crew ratios and crew complements with justification as part of the Operational Requirements Document (ORD) for aircraft scheduled to enter the inventory. These ORDs require AF/A3O coordination. Once the ORD is approved, AF/A8P will inform AF/A3O-AT, who will ensure that the changes are made to AFI 65-503. Changes must be received by AF/A3O-AT not later than 31 December to be included in the annual update to AFI 65-503.

Note: For approval of nonrated or non-CEA aircrew "X-prefixed" (non-API coded) Duty Air Force Specialty Code (DAFSC) positions, submit AF Forms 480 or electronic equivalent through channels to AF/A3O-AT in accordance with AFI 11-402.

- 10.3.2. Programmed Flying Training (PFT) Positions.
 - 10.3.2.1. Forward methodology used to determine PFT instructor requirements, including any methodology changes or deviations, to HQ AETC/A1M with courtesy copy to AF/A3O-AT. Document all PFT methodologies as a policy directive, pamphlet, or operating instruction.
 - 10.3.2.2. MAJCOM Operations (A3), in coordination with their MAJCOM manpower staff, will submit advanced student requirements to AF/A3O-AT as required by AFI 11-412. Summarize these requirements by Mission Design Series (MDS), course number, and crew position for each year of the Future Years Defense Program (FYDP). Determine all advanced student requirements (average daily student load) by multiplying approved annual student production or loads by course length in calendar days and dividing by the number of training days with a given year (i.e., AETC flying training days per year is 246 for 2009).
 - 10.3.2.3. As the PFT student load changes, instructor requirements will likely change. Commands that conduct formal aircrew training will submit instructor aircrew change requests to AF/A1M who coordinates with AF/A3O-AT for approval.
- 10.3.3. Positions based on manpower standards. Flying unit staff positions based on manpower standards (e.g., operational support squadron positions). MAJCOM/A1Ms must submit proposed changes to existing aircrew manpower standards or reapplication of existing manpower standards with justification through AFMA/CC to AF/A1M for approval. AF/A1M forwards to AF/A3O-AT for recommendation and coordination.
- 10.3.4. Colonel positions. Submit proposed additions or changes to existing colonel aircrew staff authorizations to AF/DPO and provide a courtesy copy to AF/A3O-AT.
- 10.3.5. Other aircrew positions. Staff positions include all aircrew positions not mentioned in above paragraphs. Provide offsetting authorizations for new aircrew staff requirements. Additions or changes are possible only with offsets for API codes within the same aircrew specialty. Offsetting authorizations are also required for any aircrew staff changes generated by new manpower standards or the reapplication of existing manpower standards.

10.4. Coding Aircrew Manpower Requirements and Authorizations.

10.4.1. API Code. All aircrew manpower authorizations require an API code. in accordance with AFI 11-401, Table 2.1., include an explanation for determining the correct API code. All nonrated officer DAFSC positions will be assigned API 0 and non-CEA enlisted positions will be assigned API Z. Table 10.1. lists all API codes.

Table 10.1. API Codes in MPES.

A	CAREER ENL AVIATORCEALINE FLYERS
В	CEA STAFF/SUPV WING/BELOW MUST FLY
С	CEA STAFF/SUPV WING/BELOW NOT FLY
D	CEA STAFF/SUPV ABOVE WG MUST FLY
Е	CEA STAFF/SUPV ABOVE WG NOT FLY
F	CEA OT&E/IOT&E/FMS MUST FLY
G	CEA FLYING DUTIES IN NON-USAF UNITS (EXCHANGE PRGMS)
Z	NON-CAREER ENL AVIATOR POSITIONS
0	NON-RATED OFFICER POSITIONS
1	PILOTLINE FLYERS
2	NAVIGATORLINE FLYERS
3	RATED STAFF/SUPV WING/BELOW NOT FLY
4	RATED STAFF/SUPV ABOVE WG NOT FLY
5	FLIGHT SURGEON
6	RATED STAFF/SUPV WING/BELOW MUST FLY
7	RATED FLYER IN NON-USAF UNITS (EXCHANGE PROGRAMS)
8	RATED STAFF/SUPV ABOVE WG MUST FLY
9	AIR BATTLE MANAGER

- 10.4.2. MSI code. The MSI code is a key indicator in the management of aircrew authorizations. It is essential that the MAJCOM manpower staff maintain correct MSI codes in MPES associated to aircrews. The MSI code for "crew ratio" is "F".
- **10.5. Annual Review of Aircrew Authorizations.** During the annual review of aircrew authorizations, the following must be accomplished, per AFI 11-412, Aircrew Management.
 - 10.5.1. Revalidate all API 1/2/9/A and aircrew prefixed (nonrated or non-CEA) DAFSC requirements. Verify correct application of all API attributes.

- 10.5.2. Review and revalidate all aircrew staff positions to ensure aviator expertise is required. If desired, staff reviews may be accomplished in quarterly increments and forward results of annual review to AF/A3O-AT no later than 31 October of each year.
- 10.5.3. Maintain a current file of all AF Forms 480 (or maintain equivalent data electronically).

10.6. Aircrew Manpower Requirements and Authorizations Documentation.

- 10.6.1. Pilot, NAV, EWO, and CSO requirements in AFSCs other than 11X/12X must have a "P" or "N" prefix to specify a pilot or a navigator requirement. The AFOCD found on the AFPC website establishes which AFSCs are authorized to have the "P" or "N" prefix. In addition, the AFOCD requires a suffix to be added indicating the required MWS background (e.g., P62E3W, P10C0P). This suffix takes precedence over normal AFSC shredout codes.
- 10.6.2. An AF Form 480 (or electronic equivalent) is required for all positions except those with a grade of colonel (O-6) or higher. The AF Form 480 or A480S form must clearly justify the requirement for aviator expertise (see Attachment 8 for instructions).
- 10.6.3. The justification on the AF Form 480 or A480S electronic equivalent is a unique combination of AFSC, API code, duty description, and aviator justifications. Except for O-6 and higher positions, any changes to the duty requirements that substantially alter the basis for the original position approval invalidate the original AF Form 480. The position must be revalidated and resubmitted for approval to MAJCOM A3 Aircrew Managers (for MAJCOM billets), AFMOA/SG3 (for API 5 Billets), or AF/A3O-AT for all other billets. Changes to MPES are not authorized to be effective prior to approval. In addition, approval is required for the following changes.
 - 10.6.3.1. Change from one rated specialty to another rated specialty (e.g., pilot to NAV or ABM to pilot).
 - 10.6.3.2. Change from a generalist AFSC (e.g., 11G3, 12G4, P62E3W, N80C0W) to a MWS generalist or specific AFSC (e.g., 11F3Y, 12B3A, P62E3P, N80C0R).
 - 10.6.3.3. Change from a MWS generalist AFSC (e.g., 11F3Y, 12B4Y) to a MWS-specific AFSC (e.g., 11F3F, 12B4A).
 - 10.6.3.4. Change from one MWS AFSC to another MWS AFSC (e.g., 11M3Y to 11F3Y).
 - 10.6.3.5. Change from one AFS to another (e.g., 1A0XX to 1A2XX).
 - 10.6.3.6. Change in API code from non-flying duties to flying duties (e.g., API 3 to 6, API E to D).
 - 10.6.3.7. Transfer of an authorization from one command or joint agency to another.
 - 10.6.3.8. Addition of new non-rated officer or non-CEA enlisted aircrew prefixed (X-prefix) DAFSC positions per AFI 11-402.

Chapter 11

MANPOWER ESTIMATE REPORTING REQUIREMENTS

11.1. Overview. The MER, also known as a Manpower Estimate by OSD, satisfies the congressional requirement to submit major acquisition program manpower requirements to the SECDEF. SECDEF reviews the manpower requirements prior to approving full-scale engineering development or production and deployment. Attachment 9 is an example of the required format for the MER.

11.2. General Information.

- 11.2.1. MERs are required by Title 10 United States Code, Section 2434. DoDI 5000.2, Operation of the Defense Acquisition System, directs development of a MER at several milestones including full operating deployment (FOD) of defense systems.
- 11.2.2. The MER is the source document for determining the manpower portion of the "total costs of ownership" for acquisition systems required by DoD Directive 5000.1, The Defense Acquisition System, Section E1.4. In addition, it is the only OSD-level acquisition document that addresses manpower affordability from a military and DoD civilian end strength, as well as contractor FTE perspective and the only required acquisition document that addresses skill shortages.
- 11.2.3. MERs are the authoritative source for projected out-year military, civilian and contract support manpower required for: (1) the acquisition and upgrade of a weapon system, support and automated information systems; and (2) the concurrent transfer of systems from the Active to Reserve Component and retirement of systems from the inventory. They are used to develop strategic forecasts of the defense workforce and assist with strategic planning. MERs shall be developed for all manpower-significant programs (e.g., programs with high personnel or critical skill requirements), regardless of acquisition category and consistent with the DoD component's manpower policies.
- 11.2.4. Manpower authorities assess whether: (1) the estimates are comprehensive and accurate; (2) there are sufficient resources (i.e., military, civilian and contract services) to support the program; (3) there will be adequately trained personnel to operate, maintain and support the system; (4) congressional "controls" (floors and ceilings) and administrative restrictions on special programs (such as resources "fenced" for the National Foreign Intelligence Programs) have been observed; and (5) manpower and personnel objectives and thresholds in the capabilities documents have been met.
- 11.2.5. The MER outlines the official Air Force manpower position and addresses whether the system is affordable from a military end strength, DoD civilian end strength, and contractor FTE perspective. In addition, the manpower assessment ensures that MERs are based on the level of performance most likely to be achieved and recommends post-fielding verification of high-risk factors used for the estimate. At later milestone decisions, the MER reflects results of developmental tests, as available.
- 11.2.6. The MER summarizes key personnel decisions or assumptions that have a significant effect on manpower (e.g., plans for developing new, or restructuring existing, career fields). It addresses whether there are any hard-to-fill occupations, personnel inventory shortfalls, or

other personnel concerns that could adversely impact full operational deployment (FOD) or sustainment of the system. When appropriate, the MER summarizes the knowledge, skills, and abilities required by the operators, maintainers, trainers, and support personnel and discusses any significant differences or shortfalls from the current and projected inventory.

- 11.2.7. The manpower authority for the lead DoD component for joint programs is responsible for obtaining approval of the MER from all DoD component manpower authorities participating in the program.
- 11.2.8. A draft MER should be approved for release at least 3 to 6 months in advance of the Defense Acquisition Board (DAB) milestone review so that the manpower can be used for development of cost estimates and affordability assessments. The final MER is submitted to the Office of the Under Secretary of Defense (Personnel and Readiness) [OUSD(P&R)] in sufficient time to support the Overarching Integrated Product Team (OIPT) review in preparation for the DAB. Normally, the MER is sent 3 weeks prior to the OIPT review.
- 11.2.9. The content of the MER is approved by the Assistant Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR) or designee and tailored to fit the program under review. For example, manpower for system-specific training is generally included in the estimate, while manpower for basic training is usually excluded. A MER is required at Milestones B, C, and full-rate production. It should be updated at each of these milestones consistent with changes in other program documentation. Where possible, the estimate should reference rather than duplicate information in other acquisition program documentation.

11.3. Manpower Estimating Considerations.

- 11.3.1. Estimating Methodologies.
 - 11.3.1.1. The MER briefly describes methodologies used to estimate the manpower for each type unit and organization and states whether the Air Force manpower authority, or designee, has validated the methodologies. It identifies key factors and assumptions used to estimate the manpower (e.g., maintenance ratios, equipment usage rates, crew ratios, aircrew instructor positions, course development, and fielding schedule) and states whether they were provided by the program manager, based on comparable contemporary systems, or reflect test results.
 - 11.3.1.2. Reengineering initiatives and studies, approved plans for base closures, restructuring initiatives, OMB Circular A-76 competitions, direct conversions, or other initiatives that significantly affect the quantity or mix of military and civilian manpower and contract support should be addressed.
 - 11.3.1.3. The source of support for all new and modified systems, regardless of acquisition category, is based on the Manpower Mix Criteria and Guidance for Risk Assessments. Risk mitigation takes precedence over cost savings in high-risk situations or when there are intelligence or security concerns.
- 11.3.2. Affordability. System affordability represents the degree to which the life-cycle cost of an acquisition program is consistent with the long-range investment and force structure plans of the Department and addresses the following points.

- 11.3.2.1. New, Displaced and Replaced Equipment. If systems are retired from the inventory or move from active to ARC to support fielding of the new system, the MER must identify the replaced systems, affected units or platforms and the replacement rates (e.g., two-for-one replacement), by FY.
- 11.3.2.2. Manpower Requirements and Contract Support. The MER must compare manpower requirements for the new system with those required for the replaced systems (i.e., systems retired or transferred) and describe increases or decreases in military or DoD civilian end strength and contractor civilian manpower requirements. Increases or reductions in CMEs must also be reported. The cause for increases or decreases (e.g., equipment replacement rates; reduced force structure; reduced levels of maintenance; changes in operating tempos, maintenance ratios, crew ratios; or training throughput course changes) should be reported if significant to the program. If manpower for the new system is significantly higher or lower than what was required by the replaced system, manpower officials will also assess whether manpower providing indirect support, such as base operating support (BOS) and operational medical and mess, will increase or decrease and report any significant changes.
- 11.3.2.3. Manpower Authorizations. The estimate must address resource shortfalls and state whether any increases in military or civilian authorizations beyond what is included in the FYDP, or waivers to existing manpower constraints, will be required to achieve the resource levels reported in the estimate. Major resource shortfalls are identified as risks in the MER and reported to the program manager for inclusion in the acquisition strategy.
- 11.3.2.4. Staffing. In addition to reporting the manpower requirements and authorizations, assurances are needed that skilled personnel required to operate, maintain, train and support the system will be available upon fielding. Manpower might be required and authorized but the positions not filled due to career field manning recruitment, retention, training, or other personnel issues. The MER addresses whether there are any hard-to-fill positions, personnel shortfalls, or other issues that could adversely affect fielding. Major personnel shortfalls must be identified as risks in the MER and acquisition strategy.
- 11.3.3. Risk Assessment. At full-rate production, manpower authorities will recommend post-fielding verification of high-risk factors.
 - 11.3.3.1. The MER clearly states whether the manpower reported in the estimate is subject to change.
 - 11.3.3.1.1. The MER states whether any of the factors or assumptions used to estimate the manpower are significantly different from what is used to determine manpower requirements for comparable contemporary systems and whether the differences are significant enough to represent a risk to the validity of the manpower estimate. When significant manpower reductions or changes in skill sets are expected as a result of technology insertion and/or doctrine and policy changes, the MER addresses the risk of achieving these reductions or changes commensurate with the developmental and programmatic risk of the technology and/or doctrine and policy changes. Estimates for systems under spiral or block development must indicate whether post-fielding verification of the manpower for the initial systems confirmed or invalidated the MER. The estimate must also address whether the maintenance,

- support, or training concepts represent a significant enough departure from those of comparable contemporary systems to warrant post-fielding verification of the manpower.
- 11.3.3.1.2. The MER indicates whether approved restructuring initiatives (e.g., reorganizations, functional realignments, or streamlining or reengineering efforts) have been completed for OMB Circular A-76 competitions, personnel initiatives (e.g., consolidation of military or civilian career fields), or other actions that could affect the manpower or provide for more efficient and effective processes as required by DoDI 5000.2, Section 3.7.2.1.
- 11.3.3.2. When engineering designs increase individual workloads or task complexities, the impact on human performance and risk of cognitive or physical overload must be evaluated. The MER justifies whether there is a risk that operators, maintainers, or support personnel do not have the skills or abilities to perform the required duties.
- 11.3.3.3. Major manpower resource or personnel shortfalls must be identified as risks in the MER and acquisition strategy. The MER also states whether the new system meets or exceeds manpower and personnel constraints (objectives and thresholds) in the Capability Development Document and key performance parameters in the Acquisition Program Baseline.
- **11.4. Manpower Estimate Report Preparation.** AF/A1MR prepares AF Form 1768, Staff Summary Sheet, for AF/A1 approval and a memo for AF/A1M signature. The lead command prepares all remaining items.
 - 11.4.1. Staff Summary Sheet. AF/A1MR coordinates the MER throughout the HAF and Secretariat. The staff summary sheet lists the commands responsible for developing the MER and gives a brief statement of requirements, offsets, and shortfalls.
 - 11.4.2. Cover memorandum from AF/A1M to OUSD (P&R). This memorandum transmits the Air Force report to OSD for entry into the acquisition process.
 - 11.4.2.1. This memorandum briefly identifies the program and milestone under review, resource shortfalls, personnel issues, and the effect the program will have on the Air Force manpower structure. It indicates whether increases in military or civilian manpower are above programmed levels or waivers to existing manpower constraints/restrictions are required to support the program. The cover memorandum states program risks and whether manpower constraints (objectives and thresholds) and key performance parameters for manpower are met or exceeded.
 - 11.4.3. The MER consists of the following elements:
 - 11.4.3.1. The first paragraph cites the pending milestone decision and the legal mandate for the report. If the Air Force is the lead service for a multi-service report, reference the location of the other service reports within the Air Force input. The second paragraph summarizes the program, gives the FOD manpower requirements, and states the timing and size of any manpower shortfalls. Use a third paragraph, if needed, to describe the impact of any manpower shortfall on fielding the system.

- 11.4.3.2. Program Synopsis. This provides decision makers a program summary that describes the system, shows deployment schedules, and explains the operations, maintenance, and training concepts for the system.
- 11.4.3.3. Manpower Requirements Methodology and Rationale. This illustrates manpower requirements for operations, maintenance, support, and training by component and/or command. Discuss each component's and/or command's requirement by category and the methodology used to estimate requirements as appropriate.
- 11.4.3.4. Component Requirements Detail. For each component, prepare a separate display of the manpower required for the new system. This shows basic functions used to build requirements, parallels information in paragraph 11.4.3.3., and projects the requirements by year from initial production to retirement of the weapon system. This is generally for 20 years past FOD and a five-year retirement schedule.
- 11.4.3.5. Manpower Impacts by Component. Required by OSD Personnel and Readiness (P & R), this summarizes offsets and shortfalls. It should cover the same time period as 11.4.3.4. and provide the best available data. If offsets and shortfalls are undefined or undecided, provide a paragraph listing the reasons why offsets/shortfalls are undefined and/or undecided and a projected date they will be available. Group the data by components and divide each group into requirements, offsets, shortfalls, broken out by officers, enlisted, civilians and contractors. Provide a summary of the total AF requirements, offsets, and shortfalls.
- 11.4.3.6. Statement of Manpower Requirements. This covers all years beginning with initial fielding and ending with retirement and disposal of the system, to include environmental cleanup, and includes five groupings (Operations, Maintenance, Support, Training and Total).
- 11.4.3.7. The Maintenance grouping includes organizational and intermediate maintenance. Under Support Grouping include depot maintenance, central logistics support, program office, Air Force plant representative office, contract administrative support and associated BOS manpower for each element. Under Operations Grouping include Aircrew Instructors and other operations student support (e.g., ARMS, Liaison, Life Support). Under Training Grouping include course development requirements.
- 11.4.3.8. Each grouping also includes a breakout for active officer, active enlisted, civilian (U.S. and FN), Air Force Reserve and ANG technicians, drill officer, drill enlisted, AGR officer, AGR enlisted, contractors and a total. If technician and contractor requirements are part of the program, include a man-year total, which is a total of all categories, and a manpower total which excludes the contractors and technicians.
- 11.4.4. Periodic updates to MER will follow same procedures. AF/A1 and lead command will identify known changes to initial concepts when tasked.

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-401, Aviation Management, 10 December 2010

AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Badges, 13 December 2010

AFI 11-412, Aircrew Management, 10 December 2009

AFI 25-201, Support Agreements Procedures, 1 May 2005

AFI 36-2101, Classifying Military Personnel (Officer and Enlisted, 14 June 2010

AFI 36-2116, Extended Active Duty for Reserve Component Officers, 1 November 1997

AFI 38-203, Commercial Activities Program, 20 June 2008

AFI 38-204, Programming USAF Manpower, 1 August 1999

AFI 65-503, US Air Force Cost and Planning Factors, 4 February 1994

AFMAN 38-208, Volume 1, Air Force Management Engineering Program (MEP) – Processes, 29 March 2002

AFMAN 38-208, Volume 2, Air Force Management Engineering Program (MEP) – Quantification Tools, 19 November 2003

AFPD 36-5, Civilian Personnel Resource Management, 30 November 1993

AFPD 36-14, Position Management and Classification, 1 February 1996

AFPD 36-21, Utilization and Classification of Air Force Military Personnel, 1 April 1998

Air Force Enlisted Classification Directory (AFECD)

Air Force Officer Classification Directory (AFOCD)

DoDI 1100.22, Policy and Procedures for Determining Workforce Mix, 12 April 2010

DoDI 1205.18, Full-Time Support (FTS) to the Reserve Components, 4 May 2007

DoDI 1235.11, Management of Individual Mobilization Augmentees (IMAs), 24 May 2007

DoDI 5000.2, Operation of the Defense Acquisition System, 8 December 2008

Office of Management and Budget (OMB) Circular No. A-76

Title 10 United States Code, Armed Forces

Title 32 United States Code, National Guard

Prescribed Forms

AF Form 4298, Contract Manpower Equivalent (CME) Documentation Log

AF Form 4299, Contract Manpower Equivalent (CME) Computation Worksheet

Adopted Forms

AF Form 9, Request for Purchase

AF Form 480, Aircrew AFSC/Active Flying Justification

AF Form 1768, Staff Summary Sheet

SF 52, Request For Personnel Action

Abbreviations and Acronyms

ABM—Air Battle Manager

ACR—Authorization Change Request

AETC—Air Education and Training Command

AEF—Air and Space Expeditionary Force

AFHSIO—Air Force Human Systems Integration Office

AFI—Air Force Instruction

AFISRA—Air Force Intelligence, Surveillance and Reconnaissance Agency

AFMA—Air Force Manpower Agency

AFMC—Air Force Materiel Command

AFECD—Air Force Enlisted Classification Directory

AFMAN—Air Force Manual

AFOCD—Air Force Officer Classification Directory

AFPC—Air Force Personnel Center

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFS—Air Force Specialty

AFSC—Air Force Specialty Code

AGE—Aerospace Ground Equipment

AGR—Active Guard and Reserve

ANG—Air National Guard

API—Aircrew Position Identifier

ARC—Air Reserve Component

ART—Air Reserve Technician

AT—Air Technician

BOS—Base Operating Support

BRAAT—Base Recovery After Attack

CAMIS—Commercial Activities Management Information System

CEA—Career Enlisted Aviator

CONUS—Continental United States

CME—Contract Manpower Equivalent, also known as Contract Man-year Equivalent

CPG—Career Progression Group

CSAF—Chief of Staff of the Air Force

CSO—Combat Systems Officer

DAB—Defense Acquisition Board

DAFSC—Duty Air Force Specialty Code

DCAMIS—Department of Defense Commercial Activities Management Information System

DFC—Department of Defense Function Code

DMAG—Defense Maintenance Activity Group

DoD—Department of Defense

DoDI—Department of Defense Instruction

DOPMA—Defense Officer Personnel Management Act

DRU—Direct Reporting Unit

ENL—Enlisted

EWO—Electronic Warfare Officer

FAC—Functional Account Code

FAR—Federal Acquisitions Regulation

FCT—Functional Category Code

FN—Foreign National

FOA—Field Operating Agency

FOD—Full Operational Deployment

FQ—Fiscal Quarter

FTE—Full-time Equivalent

FTS—Full-time Support

FY—Fiscal Year

FYDP—Future Years Defense Program

HAF—Headquarters Air Force

IDEA—Innovative Development through Employee Awareness

IDT—Inactive Duty for Training

IGCA—Inherently Governmental/Commercial Activities

IMA—Individual Mobilization Augmentee

IOC—Initial Operational Capability

LCOM—Logistics Composite Model

MAF—Man-hour Availability Factor

MAJCOM—Major Command

MAS—Management Advisory Study

MDC—Maintenance Data Collection

MDS—Mission Design Series

MEP—Management Engineering Program

MER—Manpower Estimate Report

MFH—Monthly Flying Hour

MMH/FH—Maintenance Man-hour Per Flying Hour

MPES—Manpower Programming and Execution System

MRF—Manpower Requirements Flight

MRS—Manpower Requirements Squadron

MSI—Manpower Standards Implementation

MWS—Major Weapon System

NAF—Numbered Air Force

NATO—North Atlantic Treaty Organization

NAV—Navigator

OCR—Organizational Change Request

OIPT—Overarching Integrated Product Team

OMB—Office of Management and Budget

OOTW—Operations Other Than War

OPR—Office of Primary Responsibility

OPTEMPO—Operations Tempo

ORD—Operational Requirements Document

OSC—Office Symbol Code

OSD—Office of the Secretary of Defense

OUSD—Office of the Under Secretary of Defense

PAA—Primary Aircraft Authorized

PAS—Personnel Accounting Symbol

PCS—Permanent Change of Station

PEC—Program Element Code

PF—Productivity Factor

PFT—Programmed Flying Training

POM—Program Objective Memorandum

RIC—Resource Identification Code

RMG—Readiness Management Group

RMK—Air Force Remarks

SECDEF—Secretary of Defense

SEI—Special Experience Identifier

SF—Standard Form

SG—Surgeon General

SMAG—Supply Maintenance Activity Group

UMD—Unit Manpower Document

USAF—United States Air Force

USAFA—United States Air Force Academy

USDH—United States Direct Hire

UTC—Unit Type Code

WG—Wage Grade

WLF—Workload Factor

YLR—Year of Last Review

YNR—Year of Next Review

Terms

Authorized End Strength—The count of Air Force military and civilian positions the Air Force needs to have funded, and cannot exceed, in each year of the FYDP to accomplish all approved missions. FYDP end strength is allocated to Commands by program element code (PEC) and category (officer, enlisted, and civilian).

Man-hour—A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Management Advisory Study (MAS)— A consultant service offered and provided by the manpower office in a client/consultant relationship which may solve a problem such as excessive overtime, problems meeting suspense, high error rates, morale problems, layout analysis, paperwork flow, work distribution and misplaced manpower. This service is not used to justify additional manpower requirements or to identify excess manning. Simply put, a MAS is a

process to assist functions in identifying efficiencies and/or better ways of operating when additional manpower is not readily available.

Man-hour Availability Factor (MAF)—This factor is the average number of man-hours per month an assigned individual is available to do primary duties. Required man-hours are divided by the MAF times the overload factor to determine the manpower requirements.

Manpower Authorization—A funded position on the UMD and in MPES.

Manpower Requirement—The manpower needed to accomplish a job, workload, mission, project or program.

Manpower Standard—The basic tool used to determine the most effective and efficient level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

Unfunded Requirements—Approved requirements for authorized workloads or projects which have not been funded.

Unit Manpower Document (UMD)—A detailed manpower listing reflecting the distribution of manpower allocations into a finite structure of authorizations (e.g., by unit and work center).

Workload Factor (WLF)—An index or unit of measure that is consistently expressive of, or relatable to, the manpower required to accomplish the quantitatively and qualitatively defined responsibilities of a work center.

Links

Publications. Publications and forms are available on the e—Publishing site at www.e-publishing.af.mil.

AFMA Air Force Portal site (including all Air Force manpower standards and colonel/chief master sergeant directed grade lists).

https://www.my.af.mil/gcss—

af/USAF/ep/globalTab.do?command=org&pageId=681742&channelPageId=s6925EC1353810FB5E044080020E329A9

ANG Manpower Change Requests. Submit ANG manpower change requests in accordance with the latest format and guidance posted on the NGB/A1M Community of Practice website (https://wwwd.my.af.mil/afknprod/ASPs/Users/request.asp?Filter=OO— DP-AN-76).

FAC Data Codes Dictionary. The list of 4—digit FACs is located in the FAC data codes dictionary https://afdd.afbudsys.disa.mil/afdd/query/coderst.cfm?stid_value=FU-500.

DETERMINING AIRCRAFT MAINTENANCE MANPOWER REQUIREMENTS USING MAINTENANCE MAN-HOUR PER FLYING HOUR

- **A2.1. General Instructions.** Aircraft maintenance manpower requirements are usually determined using a combination of LCOM and other available manpower standards. As a last resort to traditional methods, aircraft maintenance manpower requirements may be determined using the MMH/FH formula. The results of the formula, when combined with existing standards or other calculations as described below, will determine manpower requirements for an entire maintenance organization. It will not identify requirements by individual work center.
 - A2.1.1. The following paragraphs explain the features of MMH/FH formula and other calculations that can be used.
 - A2.1.1.1. Monthly Flying Hours (MFH). These are the total number of flying hours per month per primary aircraft authorized (PAA) flown by the Wing's assigned squadrons.
 - A2.1.1.2. PAA. This is the total number of aircraft assigned to support the unit's primary mission.
 - A2.1.1.3. MMH/FH. This is a factor developed and maintained by the owning command for each aircraft MDS assigned. It is based on maintenance data collected from the appropriate Maintenance Data Collection (MDC) system. Typically, MDC data information is collected for each direct-maintenance action accomplished on an MDS. This data is totaled and then divided by the number of flying hours for that MDS. This is normally done on a monthly basis. The resulting quotient is called the MMH/FH Factor.
 - A2.1.1.4. Productivity Factor (PF). This factor is used to account for productivity lost to inexperience, maintenance training, etc. The PF for a typical active duty aircraft maintenance organization is assumed to be 60 percent. This is based on historical precedence. However, when this formula is applied to a more mature workforce, it may be appropriate for a command to use a higher factor (i.e., 80%).
 - A2.1.1.5. Man-hour Availability Factor (MAF). The MAF is the average number of man-hours per month an assigned individual is available to accomplish primary duties (direct and indirect work).
 - A2.1.1.6. Overload Factor. Certain predefined overload factors are applied with certain MAFs. Application of the overload factor ensures effective use of Air Force manpower resources. It is derived from Air Force leadership's expectation that our workforce can work more than an 8-hour workday before hiring additional workforce that might be partially unproductive.

Table A2.1. Steps for Calculation of Maintenance Requirements.

Step#	Step Title	Formula or Factor Directions
1	Requirements	MFH x MMH/FH x PAA PF x MAF x Overload Factor
Step 2	Determine Maintenance Support	

	Requirements	
Step 2a	AGE and Survival Equipment	See applicable manpower standards. Note 1.
Step 2b	Shop Support	4% (0.04) of results from Step 1
Step 2c	Subtotal Steps 2a and 2b	Add results from Steps 2a and 2b
Step 3	Determine Additive Requirements:	Determined by command (i.e., Munitions, Electronic Counter Measures pods, etc.)
Step 4	Subtotal Steps 1, 2c, and 3	Add results from Steps 1, 2c, and 3
Step 5	Determine Maintenance Overhead Requirements	See applicable manpower standard. Note 2
Step 6	Determine Total Maintenance Requirements	Add results from Steps 4 and 5
Note 1	Step 2a: if AGE and Survival Equipment Manpower Standards are not available	11% (0.11) of results from Step 1
Note 2	Step 5: if Maintenance Overhead Manpower Standards are not available	10% (0.10) of results from Step 4

- A2.1.1.7. Direct Maintenance Requirements. This step of the computation determines aircraft maintenance manpower requirements for all flight line and backshop. It does not include munitions; aerospace ground equipment (AGE); survival equipment; shop support; transient maintenance; test, measurement, and diagnostic equipment; and aircrew training services.
- A2.1.1.8. Maintenance Support. This step of the computation determines manpower requirements for those elements of maintenance work which cannot be identified with a specific aircraft.
 - A2.1.1.8.1. AGE. The maintenance support for AGE includes credit for both powered and nonpowered AGE. When applicable, use approved manpower standards.
 - A2.1.1.8.2. Survival Equipment. Maintenance of survival equipment includes repair of flight clothing, parachute equipment, life rafts and preservers, etc. When applicable, use approved manpower standards.
 - A2.1.1.8.3. Shop Support. The shop support includes work performed on items withdrawn from supply (excluding engines) not related to an aircraft or other end pieces of equipment such as AGE, trainers, and non-aerospace equipment and items received from non-aircraft maintenance activities. Shop support does not include man-hours expended in the AGE and survival equipment work centers.
- A2.1.1.9. Additives. This step of the computation determines manpower required for munitions maintenance and maintenance of specialized equipment (e.g., electronic

countermeasures pods, mission crew capsules for the EC-130 aircraft) required by the aircraft for mission performance. This factor is determined by the owning command.

A2.1.1.10. Maintenance Overhead. This step of the computation determines manpower requirements for all activities related to managing aircraft maintenance staff support activities at the group level. When applicable, use approved manpower standards.

A2.1.2. Table A2.2. shows example calculations and illustrates two scenarios. Scenario 1 illustrates how to perform calculations when approved standards are available. Scenario 2 illustrates how to perform calculations when no standards are available.

Table A2.2. MMH/FH Calculation Examples.

Step#	Step Title	Scenario #1	Scenario #2
Step 1	Determine Direct Maintenance Requirements	(135 x 8.1 x 24)	(135 x 8.1 x 24)
	1	divided by	divided by
		$(0.85 \times 149.6 \times 1.077)$	(0.85 x 149.6 x 1.077)
		= 192	= 192
Step 2	Determine Maintenance Support Requirements		
Step 2a	AGE and Survival Equipment	15 (AGE)	$0.11 \times 192 = 21$
		+ 10 (Surv Equip)	
		= 25	
Step 2b	Shop Support	$0.04 \times 191.6 = 8$	0.04 x 191.6 = 8
Step 2c	Subtotal Steps 2a and 2b	25 + 8 = 33	21 + 8 = 29
Step 3	Determine Additive Requirements:	15	15
Step 4	Subtotal Steps 1, 2, and 3	192 + 33 + 15 = 240	192 + 29 + 15 = 236
Step 5	Determine Maintenance Overhead Requirements	25	$0.10 \times 236 = 24$
Step 6	Determine Total Maintenance Requirements	240 + 25 = 265	236 + 24= 260

STANDARD, WARTIME, AND SPECIAL AIR FORCE WORKWEEKS, CONTRACT MANPOWER EQUIVALENT WORKYEAR, AND MAN-HOUR AVAILABILITY FACTORS

Table A3.1. Standard and Wartime Air Force Workweeks and MAF.

Standard Workweek8	Normal 40-Hour CONUS/Overseas 5 Days/Wk 8 Hrs/Day	Extended 48 Overseas 6 Days/Wk 8 Hrs/Day	Wartime Emergency	Wartime Surgery
Computation of Assigned Hours	5 Days 8 Hours/Day 40 Hr/Week	6 Days 8 Hrs/Day 48 Hr Wk	6 Days 10 Hrs/Day 60 Hr Wk	6 Days 12 Hrs/Day 72 Hr Wk
Calendar Days/Month: 365.25 days/year 12 Months/year Less:	30.4375	30.4375	30.4375	30.4375
Holidays/Month: 10 holidays 12 months	-0.8333	-0.8333		
Weekend Days/Month1 (2 days/week)(4.3482 weeks/month) (1 day/wk)(4.3482	-8.6964	-4.3482	-4.3482	-4.3482
weeks/month) Assigned Days/Month	20.9078	25.2560	26.0893	26.0893

Hours/Day	X 8		X 8	X 10		X 12		
Monthly Assigned Hours	167.26			202.05	260.89		313.07	
	MIL2	CIV3		MIL3,9	MIL	C I V	MIL	C I V
		CONUS	OVERSEAS					
Nonavailable Categories								
Leave	9.12	14.67	10.49	10.83	5.80		0.00	
PCS-related	0.50			2.14	0.72		0.00	
Medical (Sick Leave)	1.64	6.97	4.45	1.00	2.40		2.31	
Organizational Duties	3.57			3.70	5.82		2.39	
Education & Training	2.82	1.47	1.58	2.12	0.19		0.00	
Social Actions					0.03		0.00	
Special Absences5		0.83	0.89		0.00		0.00	
Total Nonavailable Hours	17.65	23.94	17.41	19.79	14.96		4.70	
Monthly Hours Available to	149.6	143.3	149.9	182.3	246.00		308.00	
Primary Duty (MAF)6,7								

Notes:

- 1. Saturday, Sunday, or compensatory weekday for weekend workday.
- 2. Applies to all CONUS and overseas locations working a normal 40-hour workweek. This data are based on the August 2002 Peacetime Military MAF Update Study.
- 3. Alaska and Hawaii are included in the CONUS civilian computation. The civilian MAF also includes Title 32 United States Code civilians assigned to Reserve units. This data are based on the August 2002 Peacetime Civilian MAF Update Study.
- 4. There are currently no locations in the world where US direct-hire civilians are working an extended workweek.
- 5. Special absences for civilians include registration or voting, blood donations, military funerals, court leave, etc.
- 6. Monthly MAF to be used for manpower computations.
- 7. The MAFs for Wartime Sustained, Contingency and Surge have been rounded to the nearest decimal tenth. This data are based on August 1999 Military Wartime and Contingency MAF Study Report. There is no current Civilian Wartime or Contingency MAF.
- 8. Overload factors for various workweeks are provided at Chapter 2.

Table A3.2. Special Air Force Workweeks and MAFs.

Function or Location	Workweek (Hours)	Monthly MAF	Year Approved
Special MAF			
Firefighters	72	277.0	2003
USAF Academy Faculty	45	178.4	1992
FN Civilians (by country)			
Germany			
Rheinland-Pfalz	38.5	126.31	1991
	40-43	138.07	1991
	43.5-47	153.16	1991
	48-50	166.18	1991
	51-55	184.75	1991
	44-50 (6-Day Workweek)	156.68	1991
Hessen	38.5	127.00	1991
	40-45	147.62	1991
	47-54	171.32	1991
	48-51 (6-Day Workweek)	166.71	1991
Berlin	38.5-40	132.50	1991
	41.5-43	145.36	1991
	47	164.79	1991
Greece	39	139.62	1985
	40	142.86	1985
	42	152.95	1985
Italy	40	136.5	1987
	67.4	246.1	1987
	72	263.4	1987

Japan	40	149.0	1978
Korea	48	145.2	1993
Netherlands	38	125.5	1990
Philippines	40	149.0	1978
Portugal (Azores)	40	143.3	1979
	44	153.8	1979
Spain	40	139.6	1990
	72	275.15	1990
Turkey	45	148.63	1987
	48	158.9	1987
United Kingdom	39 (Nonindustrial)	143.31	1986
	42 (Industrial)	135.53	1994

Table A3.3. Annual and Monthly Man-hours for CMEs.

Contract Type	Annual Man-hours	Monthly Man-hours
Advisory and Assistance Services Contracts	1764	147.00
Federally Funded Research & Development Center Contracts	1810	150.83
Other Service Contract not listed above	1776	148.00

APPLICATION INSTRUCTIONS FOR MANPOWER STANDARDS RESULTING IN MAN-HOURS

Table A4.1. Application Instructions for Manpower Standards Resulting in Man-hours and Example.

S T E		EXAMPLE: Scenario: Manpower standard resulting in mhrs for FAC 42B100, Vehicle Maintenance, at an
E P		overseas base named "Base X." All mhrs are monthly.
1.	Follow the instructions in the manpower standard and calculate the monthly mhrs the function requires. Include all variances (positive and negative) expressed as mhrs. Sum the mhrs for the manpower standard.	After following the manpower standard instructions for Base X, it is determined total required mhrs is 7231.49.
2.	If part of the function is contracted out, subtract approved CME mhrs from the Step 1 sum to determine total in-service mhrs. Validate CMEs per guidance in Chapter 6 before applying manpower standards. Then multiply the number of CMEs by the appropriate MAF (Attachment 3) to determine	This flight has 2 CMEs; therefore, 296.00 mhrs are subtracted from the total mhrs required. This example uses the "other service contract" MAF of 148 7231.49 Total required mhrs
	FTE mhrs.	- 296.00 CME mhrs
		6935.49 Total in-service mhrs
3.	Determine the required military-essential positions in accordance with Chapter 3.	
3.a.	If all positions must be military, divide the total mhrs from Step 2 by the military MAF times the overload factor and round up. This	Scenario 1 (all positions military essential):
	is the total requirement for the work center in scenario 1. If all positions are not required to be military, go to Step 3.b.	6935.49/(149.6 x 1.077) = 43.05 = 44 military requirements
3.b.	When there is a mix of military and civilian positions, multiply the military-essential positions by the appropriate MAF times the	Scenario 2:
	overload factor.	26 military essential x (149.6 x 1.077) = 4189.10 mhrs
4.	Compute total civilian mhrs. Subtract mhrs obtained in Step 3.b. from total in-service mhrs computed in Step 2.	6935.49 Total in-service monthly mhrs - 4189.10 Total military-essential mhrs

		2746 20 Th + 1 + 11 + 1
		2746.39 Total civilian mhrs
5.	Determine the required FN civilian positions. Convert to FN mhrs by multiplying by the appropriate MAF. Do not use any overload factor for FN civilians.	There are 8 FN civilian positions currently authorized and still required. The United Kingdom 39-hour (nonindustrial) workweek MAF of 143.31 is used for this example.
		8 x 143.31 = 1146.48 FN monthly mhrs
6.	Compute the required USDH civilian mhrs.	2746.39 Total civilian mhrs
	Subtract any FN civilian mhrs obtained in Step 5 from total civilian mhrs obtained in	- 1146.48 Total FN civilian mhrs
	Step 4. If no FN civilian positions, use total	1599.91 Total USDH civilian
	civilian mhrs from Step 4.	mhrs
6.a.	Determine USDH civilian positions when mhrs are less than 926.00 for CONUS or 968.65 for overseas locations. Divide the result of Step 6 by the product of the appropriate USDH civilian MAF times the appropriate overload factor. Round result to two decimal places and then round any fractional manpower up to the next whole number.	Computed mhrs exceed 968.65; go to Step 6.b.
6.b.	Determine the required USDH civilian positions when mhrs are equal to or greater than 926.00 for CONUS or 968.25 for overseas locations (mhrs are equivalent to 6 USDH civilian positions for each respective MAF times the overload factor). Divide total USDH civilian mhrs by appropriate MAF. If the fractional manpower requirement is less than .5, round down to the next whole number. If the fractional manpower is .5 or greater, round up to the next whole number (see note).	1599.91/149.9 = 10.67 = 11 USDH civilian requirements
7.	Determine total requirements. Sum	Scenario 1:
	requirements obtained in Steps 2, 3, 5, and 6.a. or 6.b	2 CME requirements
	U.a. UI U.U	44 Military requirements
		46 Total requirements
		Scenario 2:
		2 CME requirements
		26 Military requirements
		8 FN civilian requirements

	11 USDH civilian requirements
	47 Total requirements

Note: The .5 rounding rule is inappropriate for work centers of six or less civilians because it could subject incumbents to overtime requirements exceeding the normal Air Force standard of 7.7 percent overload. For example: assume the result of Step 4 is 356 mhrs; 356/149.9 MAF = 2.37 and rounds down to 2 requirements. The .37 manpower space or 55.46 mhrs is overtime work to be shared by the 2 incumbents and equates to an 18-percent overload factor (55.46/(149.9*2) = 18%).

MANPOWER MIX DECISION PROCESS

- **A5.1. Decision Process.** The following steps describe the decision process used to determine type of manpower (military, civilian, or contract service) to use when validating manpower requirements. See Figure A5.1 for a graphic illustration.
- Step 1. Validated Manpower Requirement. A validated manpower requirement is a unit of work, usually expressed in whole man-years that a MAJCOM manpower staff recognizes as a requirement for mission accomplishment. After validating a manpower requirement, the MAJCOM goes to Step 2.
- Step 2. Is Military Incumbency Required for Unit Mission? To answer this basic question, review Table A5.1., rules 1 through 11. If the answer is yes, go to Step 3. If the answer is no, go to Step 13.
- Step 3. Is Full-time Capability Required? Decide whether the work must be performed during wartime only and need not be performed daily during peacetime. If the answer is no, go to Step 4. If yes, go to Step 5.
- Step 4. Provide Air Reserve Force Authorization. Identify the workload requirement to AF/A1M so that it can give the proper ARC authorization.
- Step 5. Are Active Military Skills Available? Check AFI 36-2101, Classifying Military Personnel (Officer and Enlisted), to determine whether proper AFSCs exist to perform the workload. You may need to check with the MAJCOM personnel office and with AFPC/A1P to determine if military skills are available. If yes, go to Step 6. If no, go to Step 7.
- Step 6. Provide Active Military Authorization. The MAJCOM funds active military authorization.
- Step 7. Is the workload appropriate for procurement by a contract? Check the current Federal Acquisitions Regulation (FAR), Defense FAR, Air Force FAR, and other applicable DoD and Air Force guidance regarding applicability of the workload for contract. (Examples include OMB Circulars and DoDI 1100.22.)
- Step 8. Are Contract Services Available? If the MAJCOM or installation contracting office determines that contract services are available, go to Step 9. If not, go to Step 10.
- Step 9. Interim Contract Until Resources Available. The MAJCOM approves an interim contract until military resources can be planned and made available.
- Step 10. Are Civilian Skills Available? The MAJCOM or local civilian personnel office determines whether civilian skills are available. If no, go to Step 11. If yes, go to Step 12.
- Step 11. Surface to HAF. The MAJCOM or local civilian personnel office recommends alternatives to HAF for resolution.
- Step 12. Interim Use of Civilians Until Resources Available. The MAJCOM approves interim use of civilians until military resources can be planned and made available.
- Step 13. Is Military Incumbency Required for Air Force-wide Mission? Review Table A5.1., rules 9 through 13. If the answer is yes, go to Step 3. If no, go to Step 14.

- Step 14. Is In-Service Civilian Incumbent Required? Review Table A5.2., rules 1 through 9. If yes, go to Step 15. If no, go to Step 23.
- Step 15. Are Civilian Skills Available? See Step 10 for review procedures. If yes, go to Step 16. If no, go to Step 17.
 - Step 16. Provide Civilian Authorization. The MAJCOM gives civilian authorization.
- Step 17. Are Active Military Skills Available? See Step 5 for review procedures. If yes, go to Step 18. If no, go to Step 19.
- Step 18. Interim Use of Military Until Resources Available. The MAJCOM approves interim use of military personnel until civilian resources can be programmed and made available.
- Step 19. Is There a Legally Contractible Workload? See Step 7 for procedures. If no, go to Step 20. If yes, go to Step 21.
 - Step 20. Surface to HAF. See Step 11.
- Step 21. Are Contract Services Available? See Step 8 for procedures. If yes, go to Step 22. If no, go to Step 20.
 - Step 22. Interim Contract Until Resources Available. See Step 9.
- Step 23. Is There a Legally Contractible Workload? See Step 7. If yes, go to Step 24. If no, go to Step 27.
- Step 24. Are Contract Services Available? See Step 8. If yes, go to Step 25. If no, go to Step 27.
- Step 25. Are Contract Services Less Expensive? When mission changes or wartime taskings dictate a review of a commercial activity, a cost comparison is appropriate. To do the review, compare all relevant costs. If yes, go to Step 26. If no, go to Step 27.

Contract prices.

Other government costs.

Transportation.

Contract administration.

Severance costs.

Other costs.

In-House Cost Elements.

Civilian Personnel Costs.

Materials, supplies, and equipment.

Maintenance and repair.

Installation overhead.

Factored costs.

Retirement, life, health insurance.

Federal taxes foregone.

Interest for capital investment.

Workmen's compensation and other benefits.

Above installation overhead.

Other costs.

Step 26. Procure Contract Services. The contracting office procures contract services.

Step 27. Are Civilian Skills Available? See Step 10 for procedures. If yes, go to Step 28. If no, go to Step 29.

Step 28. Are Civilian Authorizations Provided? The MAJCOM gives civilian authorization.

Step 29. Are Military Skills Available? See Step 5 for procedures. If yes, go to Step 30. If no, go to Step 31.

Step 30. Interim Use of Military Until Resources Available. The MAJCOM approves interim use of military personnel until civilian resources can be programmed and made available.

Step 31. Surface to HAF. Recommended alternatives must be surfaced to HAF for resolution.

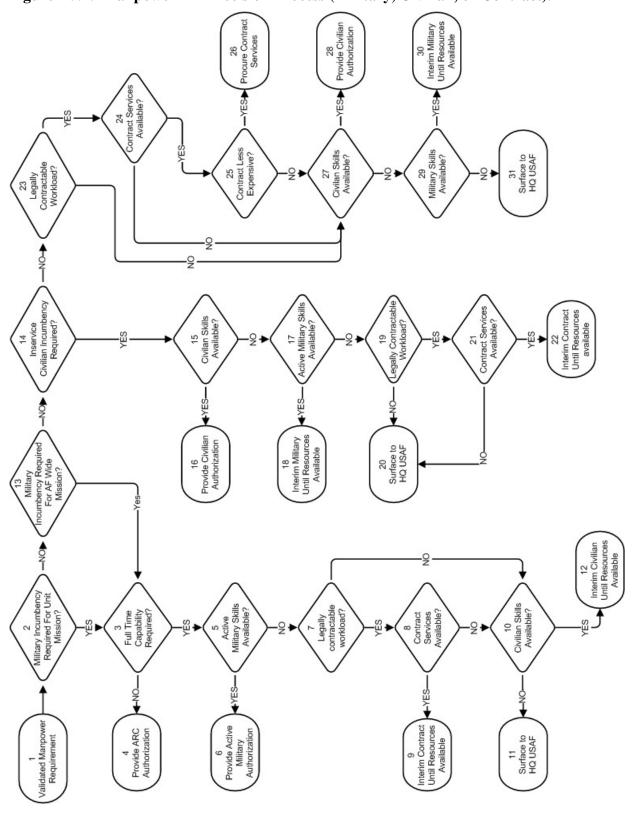


Figure A5.1. Manpower Mix Decision Process (Military, Civilian, or Contract).

Table A5.1. How to Determine Military Essentiality.

R	Procedure	
U	If position	Then the authorization is
L		
E		
1	Requires incumbent to perform direct combat as part of a unit's mission (examples: fighter and bomber aircrews, aerial gunners)	Military
2	Requires incumbent to support direct combat (examples: aircraft and aircraft systems maintenance of combat coded aircraft, missile systems maintenance, munitions maintenance)	
3	Deploys for combat or direct combat support augmentation to support AF-wide mission requirements (example: AETC security forces deploying to a forward operating location)	
4	Is required by law to be military (example: chaplains; per 10 United States Code)	
5	Requires the exercise of direct military authority or discipline (example: commanders and first sergeants)	
6	Is of a military nature supporting organizations outside the Air Force (example: JCS, FEMA)	
7	Requires previous military training (example: air weapons director)	
8	Is military by tradition or custom (example: bandsmen, USAF Honor Guard)	
9	Supports indirect combat when use of volunteer civilian employees is deemed unreasonable (e.g.; information manager at an operating location) or is tasked against a UTC to support an OPlan providing probable exposure to hostile fire	
10	Requires current military experience (example: basic military training instructors)	
*11	Is one for which no civilian skill or resource is currently available (example: information technology at remote sites)	
12	Is in a function that has been identified for in-house versus contract services cost comparison or direct	Military (temporarily)

	conversion	
13	Is none of the above (example: word processing)	Civilian or contract services
		(Go to Table A5.2.)

NOTES:

- 1. Do not include in this process:
- a. Activities totally operated by nonappropriated fund employees.
- b. Contracting for expert and consultant services.
- 2. If a position is military essential but resources or skills, including IMAs, are not available and temporary contract cannot be obtained, you may authorize in-service civilians until the situation changes.
- 3. Air Reserve Technicians (ART) and Air Technicians (AT) hold dual status as civilian and military.

Table A5.2. How to Determine In-service Civilian and Contractor Services.

R	Procedure (see Note 1)		
U L E	If position does not require military incumbency (see note 2), and	Then the authorization is	Cod e
1	Is required for priority wartime surge capability (example: depot maintenance surge)	In-service civilian	
2	Must be civilian by law (example: Principal Deputy SecAF, Financial Management, per 10 United States Code 8014)		
3	Requires in-house management responsibilities (examples: contract monitor, accountable officer)		
4	Is designated under the ART or AT programs (note 3)	In-service civilian	J
5	Belongs to a function that, if contracted, would be a personal service contract (example: direct supervision of contract employees, per FAR 37.101)	In-service civilian	
6	Is a civilian position in a function undergoing an in-house versus contract services cost comparison	In-service civilian	R
7	Belongs to a function that, if contracted, would be more expensive to the US government (example: cost comparison results involving firm contract bids according to OMB Circular A-76 and AFI		S

	38-203 [formerly AFR 26-1, Vol 1])	
8	No other skill or resource is available	In-service civilian
9	None of the above	Contract services

NOTES:

- 1. Do not include in this process:
- a. Activities totally operated by nonappropriated fund employees.
- b. Contracting for expert and consultant services.
- 2. If a position is military essential but resources or skills, including IMAs, are not available and temporary contract cannot be obtained, you may authorize in-service civilians until the situation changes.
- 3. ARTs and ATs hold dual status as civilian and military.

Table A5.3. Establishing Authorizations in Selected Reserve Units.

R						
U	Procedure (see note 1)					
L E	If the work is	And the workload is	Then classify manpower as (see note 2)			
1	Military essential	Less than full time	Drill pay position			
2	Full time in ANG		An AT who encumbers a drill pay position			
3		USAFR/ANG part-time (drill) or full time (AGR) military	Reserve/Guard			
4	Not military essential and shown to be cost-effective	Required only during inactive duty training or annual training	Drill pay position			
5	to keep in-house	Less than full time	Part-time civilian staffing, or combine the duties with currently authorized nontechnician civilian competitive Title 32 technician			
6		Full time in USAFR	Title 5 nontechnician			

NOTES:

- 1. Use to determine the type of additional ARC manpower positions assigned to each ANG or Air Force Reserve unit.
- 2. Before creating additional positions, try to:
- a. Accommodate the workload with MAJCOM-required drill pay resources (including the use

of additional man days).

- b. Seek AFI 25-201, Support Agreements Procedures, type support from active or Air Force Reserve units.
- c. Incorporate the workload into the position description of a currently authorized technician.

Table A5.4. Determining Direct Combat Support Positions (Overseas Locations).

R	Procedure	
U		
L E	If a position	Then code it as
1	Directly contributes to aircraft sortie generation, alert, launch, or recovery; or to the security of weapons or alert aircraft (examples: aircraft or aircraft systems maintenance, munitions and weapons maintenance, fuels, weapons systems security)	Military essential, based on direct support to combat operations
2	Directly contributes to missile sortie generation, alert, or launch; or to the security of weapons or alert missiles (examples: missile systems maintenance, munitions and weapons maintenance, weapons systems security)	
3	Provides aerial mission support for combat aircraft (examples: reconnaissance, in-flight refueling, airborne control and warning)	
4	Is part of the command and control structure for combat forces (examples: command post; control and warning systems; combat control; air traffic control; missile warning, space surveillance, satellite operations crews)	
5	Is wartime essential and, in order to be performed, requires the incumbent to be immediately exposed to hostile actions [examples: aircrew search, rescue, and recovery in support of combat operations, Base Recovery After Attack (BRAAT) teams]	
6	Is designated to support combat operations at hostile locations overseas during wartime or contingencies	Military essential, based on indirect support to in-theater combat operations.
7	Is none of the above	Indirect combat support (in-service civilian or contract

Table A5.5. Determining Direct Combat Support Positions (CONUS Locations).

R U	Procedure	
L E	If a position	Then code it as
1	Supports an overseas combat theater during a wartime or contingency operation in a direct combat support capability	Military essential, based on direct support to combat operations
2	Directly supports activities (generation, alert, launch, or recovery) related to strategic offense or defense, strategic airlift, air defense operations, or the security of these operations (examples: aircraft or aircraft systems maintenance, missile systems maintenance, munitions and weapons maintenance, aerospace control and warning, security forces)	
3	Directly contributes to sortie generation, alert, launch, or recovery, or tactical aircraft; or to the security of weapons or alert tactical aircraft (examples: aircraft or aircraft systems maintenance, avionics systems, fuels, or weapon systems security)	
4	Provides aerial mission support for combat aircraft (examples: reconnaissance in-flight refueling, airborne warning and control)	
5	Has duties that are wartime essential and immediately expose the incumbent to hostile actions (examples: aircrew search, rescue, recovery in support of combat operations)	
6	Is part of the command and control structure for combat forces (examples: command post; control and warning systems; combat control; air traffic control; missile warning, space surveillance, satellite operations crews)	
7	Supports an overseas combat theater during a wartime or contingency operation in a direct combat support capacity	
8	Indirectly supports intertheater operations at hostile locations overseas in wartime or contingency situations	Military essential, based on indirect support to in-theater combat operations

9	Is none of the above	Not military essential if not required
		for sustainment (in-service civilian or
		contract)

CONTRACT MANPOWER EQUIVALENT DEVELOPMENT CRITERIA

A6.1. Service-type contracts performing the following work require CME development.

- A6.1.1. Operate, maintain, repair, overhaul, rehabilitate and/or modify Air Force equipment.
- A6.1.2. Maintain, repair and/or alter Air Force real property.
- A6.1.3. Provide architectural-engineering master planning.
- A6.1.4. Engineer and/or install equipment.
- A6.1.5. Operate facilities and/or systems.
- A6.1.6. Provide housekeeping or base services.
- A6.1.7. Operate and/or maintain government-owned utility systems.
- A6.1.8. Provide demilitarization and/or disposal services.
- A6.1.9. Train in-service personnel, including dependents.
- A6.1.10. Provide medical and/or legal services.
- A6.1.11. Provide photography, duplicating, or copying services.
- A6.1.12. Provide special studies and/or related services, including consultant services.
- A6.1.13. Design and/or test new weapons systems, techniques, and equipment.
- A6.1.14. Provide engineering and/or technical services.
- A6.1.15. Provide services under industrial funds.
- A6.1.16. Operate and/or maintain leased or rented equipment and facilities.
- A6.1.17. Provide personal services.
- A6.1.18. Acquire services via DMAG Funds.
- A6.1.19. Acquire services via SMAG Funds.
- A6.1.20. Provide Advisory and Assistance Services including support provided by Federally Funded Research and Development Centers.

A6.2. Service-type contracts performing the following work do not require CME development.

- A6.2.1. Acquire Air Force equipment.
- A6.2.2. Operate government-owned industrial facilities incidental to a production contract.
- A6.2.3. Engineer or install equipment incidental to a production contract.
- A6.2.4. Construct facilities or provide engineering and related services financed by military construction appropriation (e.g., SABER contracts).
- A6.2.5. Purchase supplies (except the labor portion of Contractor Operated Civil Engineer Supply Store, Contractor Operated Parts Store, utilities, and commodities).

- A6.2.6. Lease or rent equipment and facilities.
- A6.2.7. Acquire military off-duty education programs.
- A6.2.8. Acquire "fare" surface or water off-base transportation.

INSTRUCTIONS FOR ACTIVE GUARD AND RESERVE POSITION REQUEST

A7.1. Format.

- A7.1.1. General Information.
- A7.1.2. Command. Self-explanatory.
- A7.1.3. Unit or Organization. Self-explanatory.
- A7.1.4. PAS Code. Self-explanatory.
- A7.1.5. OSC. Self-explanatory.
- A7.1.6. Base or Location. Self-explanatory.
- A7.1.7. Air Reserve Forces Component. Identify the Reserve Component (ANG/AFRC) desired.
- A7.1.8. Date Position Established. This data applies only to changes in existing authorizations. Use the date of submission on a request for a new position.
- A7.1.9. AFSC. Self-explanatory.
- A7.1.10. Authority. Applicable statute.
- A7.1.11. Authorized Grade. Show the grade to be listed in the manpower authorization file, or the grade being requested.
- A7.1.12. API. For rated AFSCs, state the proper API code (not required for enlisted positions).
- A7.1.13. Position Number. Show the position number listed in the manpower authorization file, when requesting changes to existing positions.
- A7.1.14. Duty Title. Self-explanatory.

A7.2. Supplemental Information.

- A7.2.1. Supervisor. Provide the position or duty title, unit, organization, authorized grade, AFSC and base or location of the reporting official for subject position.
- A7.2.2. Supervises. Same data as above for subordinates supervised by AGR officer or airman.
- A7.2.3. Prime Purpose. Summarize in one sentence, if possible, the principal reason for this position.
- A7.2.4. Grade. Provide rationale and analysis for requested grade.
- A7.2.5. AFSC. Provide rationale and analysis for requested AFSC.
- A7.2.6. Scope of Responsibility. Address and list number and types of Air Reserve Forces to include manpower augmentation authorizations and IMAs gained by the command or FOA. Describe the scope of major responsibilities inherent in implementing the total force policy. Do not address future or projected responsibilities that will take effect more than 12 months from the date of the request.

- A7.2.7. Qualifications or Knowledge. Identify aeronautical rating, educational background, security clearance, special experience, or special qualifications desired.
- A7.2.8. Air Reserve Forces Component. Identify the component required. If the position is responsible for both components, the position may be rotated. As a rule, establish the position equal to the component that constitutes the majority of the workload.
- A7.2.9. Workload or Manpower Relationship. Explain if the workload is new or increased. Describe the related management actions taken to accommodate the workload. Identify monthly man-hours by responsibility grouping that the position will accomplish. Identify other AGR personnel authorized and briefly establish their working relationship with the new position.
- A7.2.10. Organization Chart. Attach an organizational chart showing the proposed placement of the position and all active and AGR positions one level above or below the placement of the position.
- A7.2.11. Position Description. The position description is the major vehicle used to validate a requirement. Make the description detailed enough to identify the duties and responsibilities, and state in precise terms how the incumbent will discharge his or her duties. This section expands the information in scope of responsibility and workload or manpower relationship paragraphs.

INSTRUCTIONS FOR COMPLETING AF FORM 480, AIRCREW AFSC/ACTIVE FLYING JUSTIFICATION

- **A8.1. Instructions.** The following information is provided to assist in completing the AF Form 480, Aircrew AFSC / Active Flying Justification. An equivalent electronic form may be used in lieu of the AF Form 480.
 - A8.1.1. Command: Enter command or joint agency.
 - A8.1.2. Effective Period: Enter the effective period of the position, (i.e., From: FQ 081 To: FQ 114). Use "999" in the 'To' block for positions that will not expire.
 - A8.1.3. Date of Request: Enter the date of the requested change or addition in this format: YYYYMMDD.
 - A8.1.4. Installation: Enter the name of the installation where the position is or where it will be.
 - A8.1.5. Organization Number, Kind, Type, Detachment and Operating Location: Enter the full organization number and title.
 - A8.1.6. OSC: Enter the appropriate OSC.
 - A8.1.7. FAC: Enter the appropriate FAC.
 - A8.1.8. Duty Title: Enter duty position title that clearly identifies the individual position.
 - A8.1.9. API: Enter the appropriate API from AFI 11-401, Aviation Management.
 - A8.1.10. Grade: Enter the authorized grade.
 - A8.1.11. Prefix/AFSC: Enter the AFSC and prefix from AFOCD and AFECD found on the AFPC website.
 - A8.1.12. Special Experience Identifier (SEI): Enter SEI from AFECD as applicable.
 - A8.1.13. Position #: Enter the position number.
 - A8.1.14. PEC: Enter the appropriate PEC.
 - A8.1.15. Description: Describe peacetime and wartime duties by pilot, navigator, air battle managers, nonrated officers, civilians, and enlisted. Write the description so that someone not familiar with the work center can understand its function and the need for rated or nonrated aviator skills. Include the amount of expertise and the size of the work center. If the position requires active flying duties, provide detailed justification. If no wartime duties are applicable, then describe the position as wartime available.
 - A8.1.16. Directives: List the directive that directly supports the need for the aviator skill and the MWS experience.
 - A8.1.17. Coordination Blocks: These blocks are made available for use when needed. There is no requirement to have all blocks filled or used.
- **A8.2.** Additional Comment. All entries are mandatory except: detachment, operating location, prefix, coordination blocks and SEI.

EXAMPLE OF REQUIRED DOCUMENTATION FOR MANPOWER ESTIMATE REPORT

A9.1. Example of Program Synopsis.

- A9.1.1. System Description.
 - A9.1.1.1. Briefly describe the system, its purpose, capabilities, its intended uses, etc. Provide a brief description of all hardware and software items that constitute the system, to include the major end item, essential support equipment, training devices, simulators, special test equipment, and software. Explain the factors and assumptions used to estimate the manpower.
 - A9.1.1.2. Program force structure planned for xxx PAA (xxx combat coded, xx training funded).
 - A9.1.1.3. Initial production planned for FY xx.
 - A9.1.1.4. Initial Operational Capability (IOC) planned for FY xx.
 - A9.1.1.5. FOD planned for FY xx.
 - A9.1.1.6. Manpower estimate based upon the PAA implementation schedule.

Table A9.1. Example of Manpower Estimate for System by Command and FY.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
CMD1	13	22	35	47	70	78	92
CMD2	0	0	0	0	0	11	14
CMD3	0	0	6	20	24	32	42
TRAINING	0	8	12	12	12	12	22
TOTAL	13	30	53	79	106	133	160

A9.1.2. Operations Concept. Briefly describe the operational concept on how the system will be deployed and address the roles of both Active and Reserve units if differences exist. Specifically state if the system will be used as a weapon against the enemy since this determination affects the combatant status of the operators. The estimate specifies requirements for continuous operations and surge and describes environmental conditions or other factors that affect manpower determination. (For instance, chemical, biological, nuclear, or extreme meteorological conditions require protective clothing, which impede performance and increase manpower.) The MER identifies, by FY, echelon, manpower mix, and DFC, the type and number of units or platforms (wings, squadrons, etc.) receiving the systems and the number of systems going to each type of unit or platform. It identifies any unprogrammed force structure and plans to store systems in warehouses or temporarily place systems in training units if the plans affect the manpower. Plans for the entire life of the system, to include the planned transfer of the system from the active to ARC should be addressed. The estimate will address whether, during a crisis or war, operational units will

be located in areas where the risk of hostile fire or collateral damage is high, since these determinations affect manpower mix.

Table A9.2. Example of Total PAA by Command

CMD	Number of Squadrons	PAA Per Squadron	TOTAL PAA
CMD1	4	23	92
CMD2	1	14	14
CMD3	2	21	42

- A9.1.2.1. Utilization Rates:
- A9.1.2.2. Peacetime: xx.x sorties/month.
- A9.1.2.3. Sustained: Sustained wartime rate as specified in current WMP 8.1
- A9.1.3. Maintenance Concept. Include a brief description of the maintenance concept for both the hardware and software and address intermediate and depot support. The estimate will identify maintenance support elements by echelon, manpower mix, and DFC that are required during peacetime and war, to include in-theater depot support elements required during war. It specifies if, during a crisis or war, any of the maintenance support elements will be located in areas where the risk of hostile fire or collateral damage is high. Analysts verify whether equipment kept in storage require maintenance and if the workload is significant enough to require additional manpower. The MER indicates whether the system requires a "core logistics capability" as defined in Title 10 United States Code, Section 2464. Plans for the entire life of the system, to include the planned transfer of systems from the active to ARC should be addressed. Plans for interim or life cycle contract support will be specified once the manpower mix has been determined. It indicates if the contract services are "mission essential" as defined in DoDI 3020.37, Continuation of Essential DoD Contractor Services During Crises. The estimate also addresses whether the maintenance concept represents a significant departure from how comparable contemporary systems are maintained. The following are examples of comments that could be used to explain requirements.
 - A9.1.3.1. Base-level equipment maintenance performed at main operating bases.
 - A9.1.3.2. Maintenance at forward operating bases limited to equipment repair.
 - A9.1.3.3. Two-level maintenance concept employed to extent possible.
 - A9.1.3.4. A decision tree analysis or depot maintenance inter-service process used to determine depot-level maintenance source of repair.
- A9.1.4. Support Concept. The MER must address requirements for supply, repair parts distribution, security, BOS, life-cycle system management, warehousing, disposal, environmental clean-up, and other support. It identifies direct support elements by echelon, manpower mix, and DFC that are required during peacetime and wartime over the life of the system. Ratios may be used to estimate indirect support, to include BOS, disposal, and environmental clean-up. Unique transportation, intelligence mapping, charting and geodesy requirements, and personnel security clearance requirements must be addressed if they

require manpower increases. The MER also addresses whether, during a crisis or war, support elements are located in areas where the risk of hostile fire or collateral damage is high. Plans for interim or life-cycle contract support are specified once the manpower mix has been determined. The MER indicates if the contract services are "mission essential" as defined in DoDI 3020.37. It addresses plans for the entire life of the system, to include the planned transfer of systems from active to ARC. The estimate will also address whether the support concept represents a significant departure from what is required by comparable contemporary systems.

A9.1.5. Training Concept. The MER will briefly summarize the training concept and address the extent to which the system will rely on training devices, simulators, or embedded training. This description covers unit, collective, and joint training. The MER identifies by FY, echelon, manpower mix, and DFC, the types and number of training activities (e.g., schoolhouse and training units) receiving the training systems and the number of systems going to each type of training activity. It identifies training units that are assigned a training mission during peacetime but have operational missions during wartime. Civilian training will be addressed if the workload is significant enough to require additional manpower. Plans for interim or life cycle contract training should be specified once the manpower mix is determined. The MER indicates if the contract services are "mission essential" as defined in DoD Instruction 3020.37. Also, additional requirements that result from the planned transfer of systems from the active to ARC will be reported. The MER should address whether the training approach for the new system differs from training required for comparable contemporary systems. Following are examples of comments that could be used to explain requirements.

- A9.1.5.1. Instructional System Development analysis used to determine maintenance training requirements and equipment.
- A9.1.5.2. Training conducted at technical training locations and field training detachments.
- A9.1.5.3. Primary aircrew training conducted by an active duty training squadron with xx PAA.
- A9.1.5.4. Contracted aircrew training system (simulator) operations and maintenance.
- **A9.2.** Example of Manpower Requirements Methodology and Rationale.
 - A9.2.1. Operations.

Table A9.3. Example of Operations Recap by Category and Command.

CATEGORY	CMD1	CMD2	CMD3	TOTAL
Crew Members	1356	360	984	2700
Overhead	708	116	557	1381
Security	131	92	66	289
TOTAL	2195	568	1607	4370

A9.2.2. Maintenance. Total requirement based on LCOM study of sustained wartime requirements (See XXX LCOM Study dated xx/xx/xx).

Table A9.4. Example of Maintenance Recap by Command.

CATEGORY	CMD1	CMD2	CMD3	TOTAL
MAINTENANCE	5608	742	2780	9130

A9.2.3. Support.

A9.2.3.1. AFMC Support Requirements.

Table A9.5. Example of AFMC Support Requirements.

CATEGORY	TOTAL
Distribution	197
Materiel Management	390
Cataloging and Standardization Center and Logistics Center	3
Contracting and Manufacturing	104
Depot Maintenance	712
BOS	40
Contract Logistics Support for Simulators	13*
*CMEs	